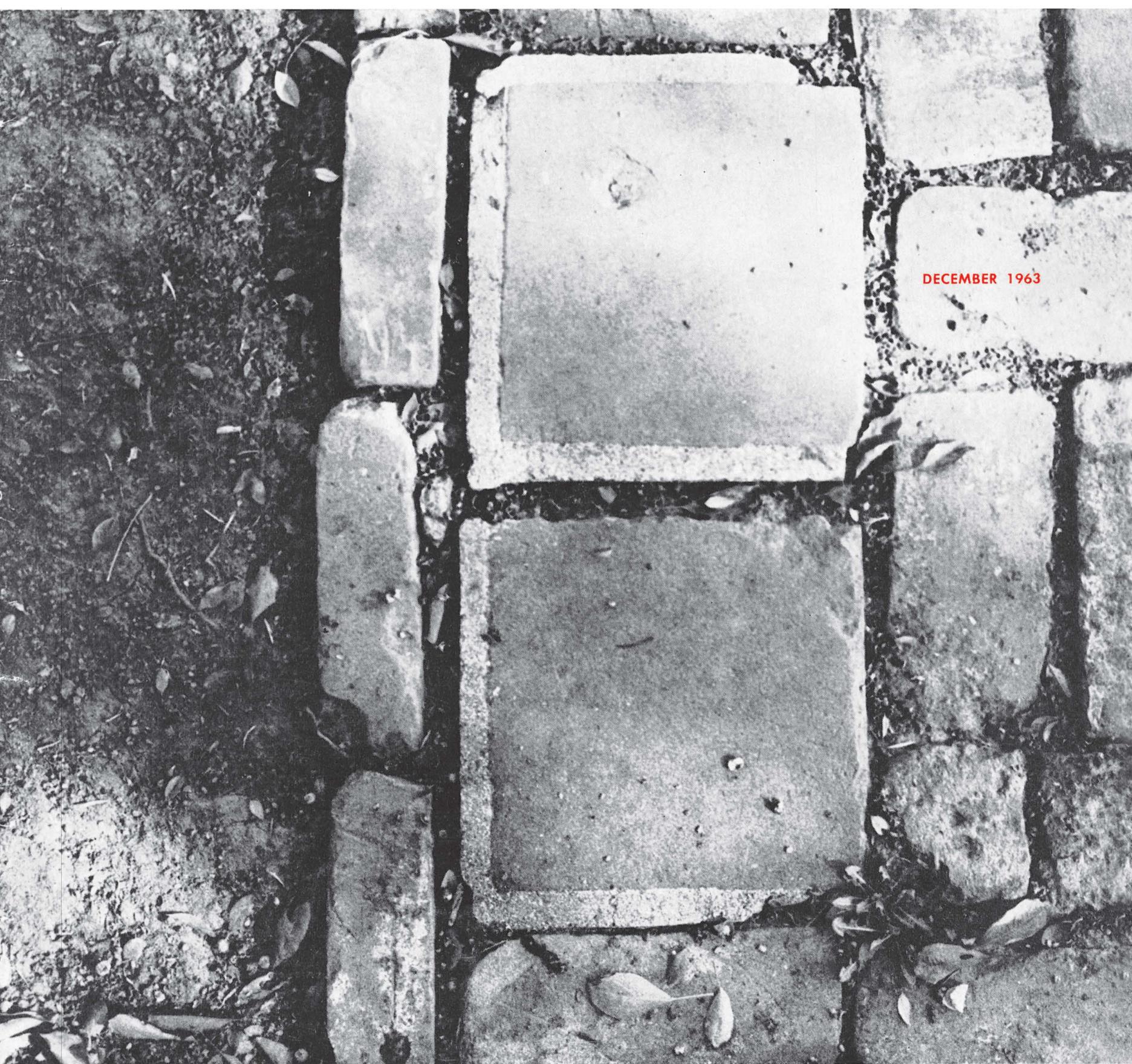


# arts & architecture

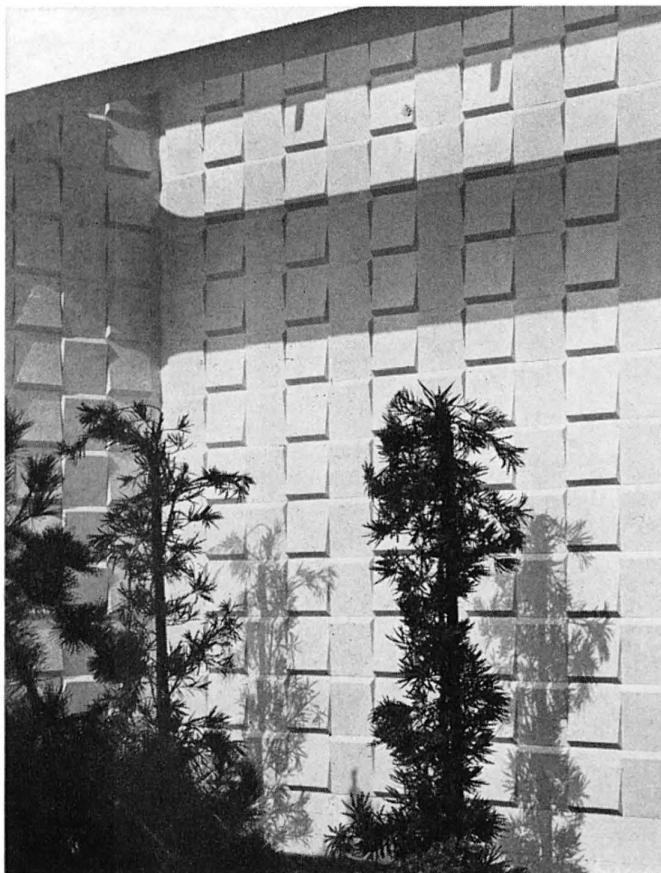
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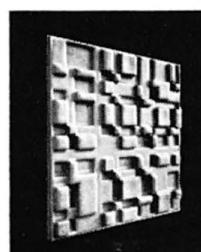
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## CONTENTS FOR DECEMBER 1963

## ARTICLES

How Long is Art? by John E. Burchard	18
Contemporary Church Architecture by Dom Frederic Debuyst	26

## ARCHITECTURE

Savings and Loan Office by Skidmore, Owings & Merrill and Robert E. Alexander & Associates, Associated Architects	14
House in Jacksonville, Florida, by William Morgan, architect	16
Navy Island Development by Alfred Browning Parker, architect	20
Structures of Warped Surfaces by Eduardo F. Catalano	22
Chicago Medical Center Redevelopment by William R. Baker	25
Church by Carleton M. Winslow, architect	29
House in Laguna Beach, California, by Richard H. Dodd, architect	30

## ARTS

Books	4
Music	6
Art	10

## FEATURES

Notes in Passing	13
New Furniture from Herman Miller	28
Et Cetera	38
Reader Service—Product Literature and Information	41

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# BOOKS

THE ROOTS OF JAPANESE ARCHITECTURE by Yukio Futagawa and Teiji Itoh. Foreword by Isamu Noguchi (Harper and Row, Publishers, \$25.00).

A highly successful demonstration of the basic concepts of Japanese architecture in an enchanting presentation of text and picture; the duet performed admirably in a "photographic quest" accompanied by succinct and simple commentaries — the text and commentaries (almost in counterpoint) — become a magic echo to the photographs.

Mr. Futagawa's photographic vocabulary, a rich and heightened impressionism notable for its velvety black and light-dark contrasts, combined with an almost uncanny gift for spacial definition, makes for a rewarding contribution to architectural photography.

In baring the roots, the authors illustrate the significant elements of Japanese architecture, beginning with the Japanese veneration of the tree, which, with all its religious and philosophic connotations became the basis for the pillar system. From the pillar to the *tatami* and beyond, the profound reverence for nature and respect for unadorned materials is manifest in exquisite wood architecture.

Here are examples of teahouse architecture; house and garden shots, with the characteristic interior-exterior integration; shrines; examples of veranda and roof structure, all further enriched by superior gravure printing. In all, a beautiful book.

THE ART OF THE WEST IN THE MIDDLE AGES. Vol. I: ROMANESQUE ART. Vol. 2: GOTHIC ART by Henri Focillon (Phaidon Publishers; distributed by New York Graphic Society, each vol., \$7.95).

The first English translation of a famous French work and a welcome addition to everyman's art library. Focillon is one of the most readable art historians, whose enthusiasm and eloquence set him aside from the word-stringing, pigeon-holing thesis-makers. Jean Bony, editor of the work states: "Everything that Henri Focillon wrote possesses that potent fascination which is the mark of great minds. And this cannot be explained merely by invoking the charm of his style, or the mastery of language which always enabled him to find a vigorous and suggestive turn of phrase. For in reading him what strikes us over and above his natural and obvious literary gifts, is his unerring vision and the luminous penetration of his intellect."

The two volumes are mainly concerned with ecclesiastical architecture — in France for the most part — yet including England, Germany, Italy and Spain. Focillon's keen observations of the genesis of styles in a study of signs and then of forms makes for a fascinating explanation of the experiments in what M. Bony terms "the variable motion of history."

There are over 300 fine illustrations and a useful glossary in a beautifully printed pair of books. Letterpress seems to have been used to yield a real bargain in these days of plushy and expensive art book production.

TREASURES OF VENICE by Michelangelo Muraro and Andre Grabar (Skira, distributed by World Publishing Company, \$29.50).

Like its companion volume, TREASURES OF THE VATICAN, this book is a splendid accomplishment combining superior color reproductions and heliogravure with excellent texts. Goethe, observing in 1786 that much had already been written about it, proceeded to write more, and referred to Venice as ". . . this beautiful island-city, this beaver-republic." And writers have not stopped since. This unique city rising from a marsh island several thousand years ago, showing the time-layers of the Romans, Byzantines, Greeks and Arabs, to become a marvel of architectural atmosphere, offers much to all men in all times.

Besides containing Piazza San Marco, the greatest square in the world — a great inspiration to architects and town-planners — Venice offers a dazzling accumulation of art and architectural riches in an almost unimaginable correlation of forms. The authors discuss in detail the civilization of Venice from its beginnings to the present and offer insight into the institution of the Doges. The illustrations display the magnificence of St. Mark's Basilica with its marvelous Treasure; the flamboyant beauty of the Venetian Gothic Ducal Palace, the Ca' d'Oro and the Ca' Foscari; Greek, Roman and

Renaissance sculpture; important examples of paintings by Bellini, Titian, Tintoretto, Veronese, Carpaccio and G. B. Tiepolo.

The casual tourist, who has had his gondola ride from the station to his hotel, photographed the Bridge of Sighs, visited a lace or glass factory and proceeded next day to Florence, should buy this book and enjoy a real return visit.

PIER LUIGI NERVI: BUILDINGS, PROJECTS, STRUCTURES 1953-1963 (Frederick A. Praeger, Publisher, \$15.00).

The second monograph on the work of this great engineer-architect is mainly a collection of photographs and drawings of schemes of both finished and unconstructed works over the past few years. Nervi focuses attention on the importance of structural architecture and "the rapport between technical correctness and aesthetic expression." There are 26 examples of Nervi's recent accomplishments, among them stadiums, a station, the UNESCO headquarters in Paris, the Palace of Labour in Turin, and the Corso Francia Viaduct in Rome. All of them dramatically beautiful.

CANDELA: THE SHELL BUILDER by Colin Faber (Reinhold Publishing Corporation, \$16.50).

Although Candela did not invent the concrete shell or the hyperbolic paraboloid, he has since 1949 created the greatest variety of shell structures extant. His virtuosity and audacious enterprise is shown in this collection of some 500 photographs and drawings covering 100 projects which include factories, houses, a cathedral, a bottling plant and a night club. All hypar types from umbrellas to free-edged shells are explained to the layman with abbreviated technical analyses and differential equations for the professional. Candela deserves better photographic treatment than the ghastly grey reproductions in this otherwise good book.

DECORATIVE ART 1963/4 (Studio Books—The Viking Press, \$10.95).

Annual international antidote for slick magazine decorative poisoning; the side effects of the antidote often as toxic as the glossy original. Among the textiles and wall-paper designs may be seen some of the corniest examples since William Morris. This "feast of ideas" however "topped" by an introduction by Christopher Read, AIRBA, provides a strange and indigestible menu. A scant few of the individual pieces (notably those of Hans Wegner, Mies, and a small handful of others dedicated to design, rather than decor) remain as good as they were a number of years ago.

## BOOKS RECEIVED

COMMUNICATION: The Art of Understanding and Being Understood. Edited by Robert O. Bach (Hastings House, Publishers, \$6.95).

THE ENGLISH TRADITION IN ARCHITECTURE by John Gloag (Barnes and Noble, \$8.50).

A HISTORY OF ENGLISH ARCHITECTURE by Peter Kidson and Peter Murray (Arco Publishing Company, \$5.95).

STRUCTURE AND FORM IN JAPAN by Werner Blaser (Wittenborn and Company, \$15.00).

ARCHITECTURE IN TRANSITION by Constantinos A. Doxiadis (Oxford University Press, \$7.50).

URBAN LIFE AND FORM by Werner Z. Hirsch (Holt, Reinhart and Winston, \$5.00).

BABYLON IS EVERYWHERE by Wolf Schneider (McGraw-Hill Book Company, Inc. \$7.95).

ARCHITECTURAL DESIGNS: Homes for the Aged edited by Robert B. Rutherford, M.D., and Arthur J. Holst (Howard Company, \$12.50).

NEW ARCHITECTURE IN AFRICA by Udo Kultermann (Universe Books, \$12.95).

MODERN ARCHITECTURAL DETAILING Vol. 1, edited by Konrad Gatz (Reinhold Publishing Corporation).

ALL THE PAINTINGS OF ANTONELLA DA MESSINA by Giorgio Vigni.

ALL THE PAINTINGS OF VERMEER by Vitale Bloch (Hawthorne Books, Inc., each vol. \$3.95).

TULLY FILMUS Introduction by Alfred Werner (World Publishing Company, \$12.50).

GRAPHIS ANNUAL, 1963/64 Edited by Walter Herdeg (Hastings House, Inc., \$15.00).

INTERNATIONAL POSTER ANNUAL Volume 11, 1963/64 Edited by Arthur Nigli (Hastings House Publishers, Inc., \$12.95).

ROBERT WETTERAU

## THE BIOGRAPHY — AND THE WHISPERED FOOTNOTE

Ralph Waldo Emerson, that most perceptive American, once wrote that all great men come out of the middle classes. He went on to include those of high birth for, as he pointed out, they have had the common touch which places them where they were not born. Except for George Washington among our earliest presidents, the heavy smoke of the clearing log cabin hangs about their lives, and putting the Emerson gauge to the test, the current crop of important biographies, some of them definitive, prove the wisdom of what he wrote in an age that was not essentially middle class conscious.

Forrest C. Pogue has written an outstanding biographical study in *George C. Marshall: Education of a General* (Viking Press, \$7.50,) the first of three volumes which will trace the career and the contributions of one of our great modern citizens. Marshall was a smalltown boy who presaged his later greatness by a relentless drive to be good at everything he tried. The wise use of anecdotal material, the carefully drawn early years, the significant signposts of greatness to come, make this a highly readable and highly important biography. Marshall left his image on this age in both war and peace. President Roosevelt with his usually unfailing eye for ability and potential, selected him out of Army rank and placed him in command at a time when we needed a winner. Although he had had a good solid career as a soldier from VMI, through his term of office as aide to General Pershing in World War I, he was eclipsed by such glamor officers as MacArthur, Drum and others high on appointment lists. When war shadows darkened, the great politicking and jockeying for position began, and it is significant of the man that Marshall did nothing excessively flashy for himself but sat back and waited. *George C. Marshall* is a meritorious first volume in the story of a great life, offering a vignette of the man's formative years, of our own deficiencies in the interregnum of wars, and of the stultifying life in Army barracks at a time when we didn't need, want or depend upon an army.

No one would accuse Franz Josef von Hapsburg Emperor of the Austro-Hungarian Empire of being middle class, although the point does come through in *The Fall of the House of Hapsburg* by Edward Crankshaw (Viking Press, \$7.50,) that he was "klein-burgerlich" — petty bourgeois. This excellent account of the collapse of one of the oldest reigning houses in Europe (Count Rudolph of Hapsburg, 1273, progenitor of the line) traces the story of the decline through the reign of its last real monarch, although Karl was to succeed to the throne after the death of Franz Josef in 1916. There is nothing more complicated than the politics of the Austro-Hungarian Empire in the 19th and early 20th Century not excepting the politics of Central American banana republics in the 1870's. As he emerges through the careful research and always brilliant writing of Edward Crankshaw, a superb historian and craftsman, Franz Josef is not all "schlagsahne und oberst," that gorgeous and tasty cream topping to the *kuchen* at Vienna's Demels. He was a man of feeling and of substance, and managed through personal will as well as political bungling to give his mosaic empire a semblance of internal peace and some prosperity in the years of his hegemony. He was beset by intrigue and tragedy: the suicide of his son as a result of a romantic yet tawdry love affair embittered him. But he never forgot the Queen Victoria-like role which he felt destined to play. Crankshaw reprises a theme which Veit Valentin, the historian who has written one of the best histories on the subject (*The German People* Alfred A. Knopf), stressed — that Austria persisted in presuming to greatness at a time when Prussia was running the European show. Crankshaw has a sense of history, an understanding of men and movements that make reading him a delight. This is great tragedy in the grand manner, told by a master craftsman.

John Ruskin, an apostle of Thomas Carlyle, was the literary spokesman for a polite Imperialism in his later years. Earlier he was a spokesman for the arts and artisans. He turned from art to social questions as the drive for Anglo-Saxon world dominance grew in the middle and later years of the 19th Century. Whatever his aesthetics and his social point of view, he was a superb writer and his *Seven Lamps of Architecture* is still one of the great classics of architectural criticism. *The Genius of John Ruskin*, edited and with an Introduction by John D. Rosenberg (George Braziller, \$7.50,) stresses his idealism and his respect for the greatness of Britain's past. No strident Rhodes or Clive, Ruskin was a champion of Gothic Art and British supremacy in equal parts. His early training was literary and cultural. If ever a child was set upon the path of learning and writing, John Ruskin was that child. His style — some one has said his prose is the finest in the English language — shows the training

which included tours, studies and an endless search for beauty in art.

In his later years Ruskin devoted his studies and thoughts to social justice, and here some of his finest essays emerge in this classic collection of Ruskin at his best. Prof. Rosenberg, who now teaches English at Columbia University, has edited the many works of Ruskin — his collected works are in thirty volumes — to bring us the best of one of the finest voices of the Victorian Age.

Ruskin, the perfectionist, would hardly have approved of a man like Charley Russell, the celebrated cowboy artist. He might have decried his naturalism and misunderstood his lusty love of life. That Charley was an artist both with his paint brush and at living emerges in *Recollections of Charley Russell* by his friend, Frank Bird Linderman, with an introduction by H. G. Merriam (U. of Oklahoma Press, \$6.95,), a handsomely illustrated edition. Charley and Frank were kindred spirits: they loved freedom, they loved the West, they both had an innate desire to "set things down" so that they would live to be remembered another day. Charley was an accomplished artist; Linderman shows his unusual skill as a writer who captures the robust humor of the land. Both men came west in the early 1880's and met in 1897. It was natural that they should gravitate together, and *Recollections of Charley Russell* tells the wide-open story of how and why. Tops in western Americana.

Certainly Max Gordon, born Meichel Salpeter, on New York's east side tenement district, fulfills all the pre-requisite's for Emerson's social theory on greatness. He fell in love, he explains, with the theatre when he was eight. A roster of his productions includes "Roberta," "Born Yesterday," "Late George Apley" and "The Women" among countless others, attesting to his tremendous ability to pick winners when others were picking the losers. Producer Max Gordon and Broadway are synonymous and *Max Gordon Presents* by Gordon and Lewis Funke, drama editor of the *New York Times*, is a rich mine of Broadwayana, told by one of the few men who knew it intimately, loved it, and gave it much of himself. It is hard-hitting and real; and Gordon recounts the flops along with the hits. His account of how *Born Yesterday* was salvaged from financial ruin when Jean Arthur developed whatever highstrung actresses develop one day before a Broadway opening, is a classic of its kind. The cast of this book is a Who's Who of Broadway at its greatest. It's controversial, it is biting, it is colorful, and sheer magic and drama from beginning to end.

ROBERT JOSEPH

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## C U R R E N T L Y A V A I L A B L E P R O D U C T L I T E R A T U R E

**Editor's Note:** This is a classified listing of currently available manufacturers' literature. To obtain a copy of any piece of literature, list the number which precedes the item regarding it on the coupon which appears on Page 39, and give your name, address and occupation. Return the coupon to Arts & Architecture, and requests will be filled as rapidly as possible.

### APPLIANCES

(229) American Stove Company: Brochure new automatic clock control six-burner, top-of-stove arrangement Magic Chef gas range; one-piece turret top, 43" x 23 1/2"; two super duty burners; waist-high Swing-Out broiler; oven 18" wide, 20" deep, 14" high, Fiberglas insulated; excellent contemporary design.

(56) Continental Water Heater Company: Concise folder gas storage water heaters; installation, specification data; good working information rating line.

(230) Day & Night Manufacturing Company: Practical 8-page brochure domestic, commercial hot water heaters; specification tables, sizing recommendations, sketches, photographs full line heaters; good line sensibly presented.

(57) Department of Water & Power: Brochure, folders, data electric appliances; good source of information on all-electric houses; rate information available.

(58) Given Manufacturing Company: Folder new Waste King automatic food waste pulverator; fits sink drain; odorless, clog-proof, safe; disposes of bones, fruit pits, fibrous foods; western manufacturer, available.

(61) Ingersoll Steel Division, Borg-Warner Corporation: Brochure (16 pages) new Ingersoll Utility Unit providing kitchen, laundry, bathroom, heating, plumbing, electrical lines; installation, specification data.

(231) Judd Whitehead Manufacturing Company: Color brochure Judd Whitehead electric water heaters, largest seller in field; sizes 10 to 140 gallons; thermostatically controlled, fiberglas lined, enamel finish; good product well shown.

(232) Kinney Brothers: Folder Sani-Way electric garbage eliminator, eliminates all food wastes through sink as discarded; handles small bones, fruit pits, corn husks, etc; installs easily in any sink, definitely worth appraisal.

(233) Kinney Brothers: Good 12-page brochure Amana "walk-in" freezer-cooler; completely prefabricated, moves through doorways; 23 cubic foot capacity; also data 9 cubic foot or 5 cubic foot kitchen models; full specifications.

(234) Kinney Brothers: Concise folder Whiting home freezers; good design, 4 1/2 cubic foot and 11 1/2 cubic foot models. Full specifications; worth appraising.

(235) Los Angeles Water Softener Company: Brochure Los Angeles Suds-master Water Softener; well designed, 7 sizes.

(236) Ranier Water Softener Company: Brochure Ranier Water Softener, using Rain-X, new resinous mineral softening agency; good product, western manufacturer.

(173) Rheem Manufacturing Company: Brochure Rheem water heaters, water softeners, heating units, cooling appliances; well designed, good engineering.

(237) Servel, Inc.: Folders, brochures new 1947 Servel gas refrigerators; well styled; frozen food, moist-cold, dry-cold compartments; no noise, wear, moving parts; powerful selling by major manufacturer.

(238) Sierra Water Softener Company: Series of folders Sierra standard and portable water softeners; tables of specifications, capacities, prices.

(64) A. O. Smith Corporation: Color brochure Smithway Permaglas glass-lined water heaters; glass fused to steel; no rust, corrosion; sizes, styles, specifications.

(177) Southern California Edison Company: Well illustrated, idea-packed booklet electricity in house plans; full information electric appliances; one of best sources information.

(66) Sparkler Manufacturing Company: Folder Sparkler filters for residential tap water; removes chlorine, off-tastes, odors, sediment, color, rust, algae; installation, specification data; sensible new product.

(188) Thermador Electrical Manufacturing Company: Folders Thermador electric bathroom heaters; switch at top; well designed; wide range of sizes.

(187) Western Stove Company, Inc.: Brochures, folders all Western-Holly ranges, including Town & Country eight-burner custom built; good contemporary design, well engineered; available immediately; should be in all files.

(68) Westinghouse Electric Corporation: Folder new table-top water heater; electric, 40-gallon; displaces kitchen cabinet, provides 4' square porcelain enamel worktop.

### CABINETS, COUNTER TOPS

(239) Boro Wood Products Company: Folders hardwood white enameled kitchen cabinets, battleship tops, sinks; well constructed, practical designs,

readily available; reasonable cost; suggestions for kitchen layouts.

(119) Formica Insulation Company: Folder Formica cabinet tops; colorful, spotproof, durable, sanitary; does not chip, crack, break; not injured by alcohol, fruit acids, ordinary alkalies; withstands 275 degrees Fahrenheit; wide color range.

(240) Kinney Brothers: Fully illustrated, well presented brochure Elgin Steel Kitchens; contemporary design, rust proof, pre-formed heavy gauge steel construction, heavy insulated doors, roller bearing drawers, chrome handles, built-in sub-bases; sketches of all models.

(241) Kinney Brothers: Detailed 8-page folder I-XL kitchen; well designed, kiln-dried hardwoods; inlaid linoleum tops, or without tops; simple hardware, Folder gives all technical information; wide selection sink bowls available.

### DRAFTING ROOM EQUIPMENT

(242) The A. Lietz Company: Folder Lietz Basswood-Balsa drawing board: Basswood panel both faces, waterproof bonding, rigid frame, Balsawood core, accurate 90° corners; based on aircraft engineering; 1/3 usual weight.

(243) William H. Mortimer: Folder Haneel Tri-Vision camera; viewer; good for showing architectural details full color, three dimensions; camera takes good photographs, sharp; reasonably priced.

(244) Rapidesign, Inc.: Folder new multiple scale for architects; combines 10 scales without lift or sliding instrument from drawing; scales calibrated 1/8", 1/4" and 1/2" to one foot; instrument is 3 1/2" x 10"; valuable for correctly spacing stairs, rafters, studs, joints, etc.

### ELECTRICAL EQUIPMENT

(245) Charles E. Barnes & Son: Brochure new Barnes Wire-Hiway baseboard wiring arrangement; provides wiring facilities, anchors, partitions; wires carried rear panel; front panel simple baseboard; outlets anywhere; foot switches eliminate wall switches; good product.

(186) Northern California Electrical Bureau: Handbook of residential wiring design; one of best planning, technical data.

(246) Roberts Glo-Switch Company: Brochure Glo-Switch electric light switch; neon light in translucent handle glows when off; single pole type, fits any receptacle; several colors.

(72) Square D Company: Full color folder Square D multibreaker; guards electrical systems against overload, short circuits; details wiring to use of multi-breakers; good.

### FLOOR COVERINGS

(73) Congoleum-Nairn, Inc.: Catalog linoleum, asphalt tile wall and floor products; index to uses, specification,

installation data; swatches of colors, patterns.

(219-A) Gladding, McBean & Company: Folder Mission Red Floor Tile; hard burned, smooth texture; ideal for paving patios, terrace, walks, loggias, facing walls, garden seats, stair treads and risers; 12" x 2 1/2" x 3/4" to 12" x 12" x 3/4"; western manufacturer, available.

(74) Tile-Tex Company, Inc.: Illustrated brochure asphalt tile, 3" x 3" to 18" x 24", wide range colors, patterns; feature strips, cove bases; features modern design.

### GENERAL

(247) California Rustic Redwood Company: Folder redwood fences, gates, garden structures; woven panel, nailed paling, mendocino, split rail, pioneer mortised post fences.

(3) Celotex Corporation—Six-page full color presentation of Cemesto Precision-Engineered House. House is rather better than most contemporary efforts to solve housing problem by mass production. Worth seeing.

(4) Kawneer Company—Thirty pages including report of the jury, elevations, plans, perspectives, and details of the prize winners of the Kawneer-New Pencil Points Architectural Competition, "The Store Front of Tomorrow."

(5) Kawneer Company—Twenty-four page booklet with 31 perspective sketches of well-designed sales-building store fronts.

(6) Libbey-Owens-Ford Glass Company—Twenty-four well illustrated pages on solar houses. Explains fundamentals of planning "open houses" and gives good examples, both in photographs and sketches. Question and answer section is practical.

(7) Libbey-Owens-Ford Glass Company—A data brochure for the architect on glass and its uses, in 24 pages. Carries tables for use in specifying. Is worth file space for ideas suggested. Full technical data.

(75) Owens-Illinois Glass Company: Manual planned lighting in school classrooms; data brightness ratios, reflectances, bilateral lighting, fenestration; features Insulux Glass Block construction.

(76) Pittsburgh Plate Glass Company: Brochure (36 pages) use Pittsburgh products to increase retail store sales; profusely illustrated showing use Carrara structural glass, suede Carrara, PC glass blocks, mirrors, plate glass, Herculite doors, Pittco front metal.

(12) Republic Steel Corporation—The use of Republic Enduro Stainless Steel in hospital equipment is contained in a brochure of 24 pages. Well illustrated, documented, including laboratory corrosion data. Belongs in the files of any architect doing hospital work, or work involving hospital or diet kitchen equipment.

(Continued on Page 39)

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although this is not at all necessary." 6-3-60 by LaMonte Young.

I like, too, Walter De Maria's *Project for Boxes*, called *Boxes for Meaningless Work*:

I will have built two small boxes.  
I put small things in the boxes.  
A sign explains the boxes to any  
one who should approach them.  
It says "Meaningless work boxes."  
Throw all of the things into one  
box, then throw all of the things  
into the other. Back and forth,  
back and forth. Do this for as long  
as you like. What do you feel?  
Yourself? The Box? The Things?  
Remember this doesn't mean any-  
thing. — March 1960

You see, here is poetry, didactic, up-to-date: setting forth standards for performing meaningless work, questioning your responses, pointing what could be a moral.

"For the work has not been undertaken without thought. Fifty years before the first stone was laid the art of architecture, and especially that of masonry, had been proclaimed as the most important branch of knowledge throughout the whole area of a China that was to be walled round, and all other arts gained recognition only in so far as they had reference to it . . .

"I was lucky inasmuch as the building of the wall was just beginning when, at twenty, I had passed the last examination of the lowest grade school. I say lucky, for many who before my time had achieved the highest degree of culture available to them could find nothing year after year to do with their knowledge, and drifted uselessly about with the most splendid architectural plans in their heads, and sank by thousands into hopelessness. But those who finally came to be employed in the work as supervisors, even though it might be of the lowest rank, were truly worthy of their task. They were masons who had reflected much, and did not cease to reflect, on the building of the wall, men who with the first stone which they sank in the ground felt themselves a part of the wall."

That's Kafka again, a statement to meditate on. Let's remind ourselves about Franz Kafka. He was a petty clerk, an amateur writer of no significance, unknown to the great record of the culture of Vienna, where he lived, who privately and without desire of publication, and without professional standards, droned out on paper the seemingly endless soliloquy of his small life, and died, leaving instructions that all he had written should be destroyed. And that seemingly endless dramatic soliloquy of his small life, the work of an amateur, nourishes and enhances, by its subversion of "the real values that make a civilization great", not only the Viennese culture it adorns but the entire condition of the human mind, for that and only that — be pleased by it or not — is civilization.

"Every fellow-countryman was a brother for whom one was building a wall of protection, and who would return lifelong thanks for it with all he had and did. Unity! Unity! Shoulder to shoulder, a ring of brothers, a current of blood no longer confined within the narrow circulation of one body, but sweetly rolling and yet ever returning throughout the endless leagues of China."

Several months ago I drew notice to the *Untitled Epic Poem on the History of Industrialization* by Buckminster Fuller, completed 1940, published 1962 by Jonathan Williams, the same year Fuller was the Charles Eliot Norton poetry lecturer at Harvard — a broadly drawn interpretation of the purpose of these lectures, as it was when Stravinsky used them to deliver his *Poetics of Music*. Fuller, who has been his life through an unsurpassed amateur of whatever he does, who has nourished and enhanced the "real values that make a civilization great", delivers his *Untitled Epic* with the same disdain for "standards of high, professional excellence" that has enabled him to outprophesy, outdesign, eventually outwit, and finally outmathematicize the endorsers of these "standards", because he was looking to the evolution of things orderly, while they were looking to the past.

So he caught the "Publicitors", as he calls them; their scheme was to watch all artists and listen to original thinkers and for every creative expression articulated by them to devise a reflection model

which though equally glamorous in surface appearance as the original was actually reversed in face and also completely lacking in substance. The reflection models they then presented with an alchemist's wink to the client . . . Thus would the Publicitor and all his handymen;— his pseudo da Vincis;— industrial designers and prostitute writers;— always be certain of hitting the Jack Pot and wearing the laurels while the clients safely enjoyed being the patrons of art. What a wow!

And he goes on, and he keeps up writing the American language, as exact, translucent, easy to get through, quick to the point, and impossible to quote sufficiently, because it adds, adds meaning and doesn't quit, as his prose is not. Here is an engineer whose mind was made to — besides other things — think poetry, not learn it. Poetry is the quickest, most exact, efficient means, if you wish and can do it, of saying what you think.

When corporate merger had effected sufficient acromegaly,— an uneuphonious, even awkward, word,— meaning paralysis due to sheer bulk of head, hands and feet,— (a much worse affliction than elephantiasis) the Publicitors self-endowed themselves further with unblushing omnipotence in the detection of and interpretation of public taste consumer appetites, and national mental capacities, without protest from their horn-swoggled clients;— without recourse or even quits-rights for the tolerant enough even if wise cracking public.

So much for the various committees and commissioners on the arts which are being set up and setting themselves up to advise the public and its public representatives about the arts.

But where are the artists?

Paradoxically the poet's preoccupation with describing the indescribable and his disdainful neglect of the physical for what it precisely is worth allows him to fall into the psychological nature-trap tended by those who exploit such illusory preoccupations with pragmatic glee. That is they exploit him by dealing in fish which only the poets can catch with their creative imagination nets. The pragmatists have only to stand by their baskets infra-visible to the ultra rangeing spectrum of the poets, as the latter throw the caught fish aside, shimmering, flapping, and vital, disdaining for the moment of even thinking of consuming such beauty,— and only intent on casting again . . . Thus are the poets kept poor, poor in eats, while rich in potential.

Who among the poets has had the art to say that like that!  
And what the poet wrote  
which may live down the ages

(Continued on page 37)

## ART

DORE ASHTON

## THE COLLABORATION WHEEL: A COMMENT ON ROBERT RAUSCHENBERG'S COMMENT ON DANTE

When I came to re-read Dante's *Inferno* for the first time since term-paper days, I took T. S. Eliot's counsel to heart. His advice — to forget about obscurities of allegory and arcane interpretations in order to enjoy the poetry — struck me as eminently sensible. Allegory, he pointed out, means clear visual images, and clear visual images are given more intensity by having a meaning. "We do not need to know what the meaning is, but in our awareness of the image we must be aware that the meaning is there too."

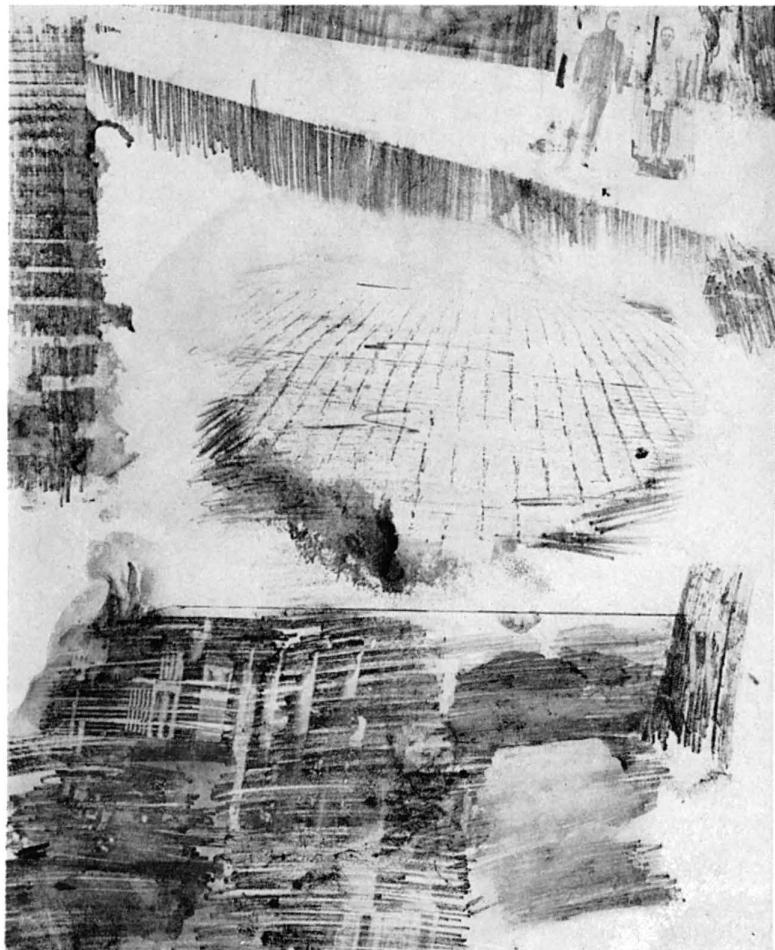
A sly induction if there ever was one. As Eliot well knew, once you are taken by Dante's poetic imagery there is no end to the speculation and inquisitiveness it arouses.

But I'm getting ahead of myself.

The incident that sent me back to Dante's text was an exhibition of Robert Rauschenberg's illustrations for the *Inferno*. He is, to my knowledge, the first avant-garde artist to come to grips with the problem. I call it a problem because there are so many precedents, which some artists would find inhibiting, and because the art book illustration is so meagerly developed in this country.

Rauschenberg set himself the problem and worked for two years, canto by canto, until he had completed thirty-four extraordinary illustrations: the first idiosyncratic Dante interpretations of this century.

You have to know a little about Rauschenberg to understand why he of all people seemed so unlikely a Dante man. Although still in his thirties, Rauschenberg is known internationally as a forceful proponent of the avant-garde will. For many years he has played the role of *enfant terrible*, shocking the public with his combine paintings in which he introduced such mundane materials as chairs, mattresses, stuffed animals and dirty socks. One of his first public gestures was to exhibit an ensemble of huge empty canvases.



Robert Rauschenberg  
Dante's *Inferno*, Canto XXVI  
Courtesy Leo Castelli Gallery

Combine drawing 14½" x 11".  
Photograph by Rudolph Burckhardt.

Rauschenberg's unorthodoxy extends to his painting methods. Much of his imagery, particularly in watercolors and drawings, is derived from the popular press. He often takes newspaper clippings, usually portraying modern archetypes such as athletes and policemen, and applies them directly to his surfaces, either transferring them by rubbing their backs with pencil, or actually pasting them on. Sometimes his combine paintings incorporate radios and other noisemakers, aligning him in the strange modern history of naturalism.

Even Rauschenberg, of course, is backed by a tradition. His spiritual fathers were the Dadaists, those disillusioned artists of the First World War who mocked the bourgeoisie, human reason and art itself. More particularly, Rauschenberg probably enriched his own vision by familiarizing himself with the greatest dada of them all, Kurt Schwitters. It was Schwitters who took the throwaways of everyday life — bits of railway tickets, maps, candy-wrappers and whiskey labels — and construed them in startling contexts, pointing to a new value and emphatically denying the slick artificiality of academic art.

This would seem an odd heritage for a Dante enthusiast. But there is the other side to dadaism: its morality. The antics of the dadas had a point and the point was to criticize and, hopefully, to correct corrupt notions of art and life. The social and esthetic criticism inherent in their work is extended in the work of Rauschenberg who earnestly hopes to make his audience re-evaluate daily experience. "I am trying to check my habits of seeing," he has said, "to counter them for the sake of greater freshness."

It is this tributary from dadaism up through surrealism that feeds Rauschenberg's imagination and makes him the ideal Dante illustrator.

An allegory is a veiled presentation of a meaning implied but not expressly stated. Rauschenberg's autographic technique has always led him to draw veils over his images. He has always snatched at fragments of real life only to blur and reconstrue them. He is akin to Dante, universal master of sightseeing, in that he quivers responsively before the multiplicity of what he sees. As Rauschenberg says of himself, he tends to see everything in sight.

To retrace a bit: When I first saw Rauschenberg's Dante I was pleasantly jolted. Not because I remembered incidents and found them spelled out in Rauschenberg's drawings, but because his native approach to visions seemed apposite to Dante's. Rauschenberg did not stick to an orthodox incident-by-incident scheme, but rather, he established from the very beginning the complex movements, involutions and even inconsistencies of the poem, conjuring the overall atmosphere in the same *circular* way that Dante had organized his poem. Or so it seems to me. I have never thought of the *Inferno* as a scale-model with so many ledges and circles. Rather, I conceived it to be a symbolic expression of an introspective journey which could never be plotted. This is exactly how Rauschenberg read the poem. He saw that the poetry itself commanded first attention.

Later, when I undertook to do the commentary for the deluxe edition of these thirty-four cantos (to be published by Harry N. Abrams) I was able to follow Rauschenberg's approach closely. In the hours and hours we spent in his studio reading over John Ciardi's translation and gazing at the drawings, both of us saw the inexhaustible points of departure. The wheel of collaborations — Dante with his predecessors, Dante with posterity, Eliot with Dante, Ciardi with Dante, I with Rauschenberg, and Rauschenberg with all — brings good fortune.

Unbound by previous convention, Rauschenberg constructed his *Inferno* in an original fashion. His method of juxtaposition closely resembles a cinematic technique. (Dante's poem with its abundance of direct action would make a first-rate film script.) Rauschenberg makes montages of the symbols in each canto. A montage, according to Eisenstein, has realistic significance "when the separate pieces produce, in juxtaposition, the generality, or synthesis of one's theme." This is precisely what Rauschenberg's images do, for in their sliding backward and forward, and fading or becoming prominent, and in their synoptic simultaneity, they suggest the quality of time, essential to Dante's journey. His compositions, often in three divisions like film strips sliding downward, even echo Dante's symbolic architecture, for the threes can be likened to terza rima.

Just as Ciardi's translation is stinging and invigorating like salt spray, Rauschenberg's lexicon of basic symbols is startling, to say the least. To begin with, Dante appears most often as an anonymous nude pinned to a chart that looks like a medical measuring chart. Sometimes he does not appear at all, as in cantos where he takes no direct part. Virgil, on the other hand, is often less substantial because he is a shade. Then again, he appears rather solidly as an authority figure dressed as a referee in baseball garb, as a space-suited rocketeer, or as a neat Madison-Avenue-oriented politician.

Why is Dante so often faceless? I take it that Rauschenberg had in mind the symbol for Everyman, a medieval prototype which certainly Dante had in his mind. Dante's anonymity in Rauschenberg also serves to echo Dante's voice which in the *Inferno* changes frequently. Now he is self-mocking, now he is arrogant, now omniscient and detached, now stammering with fear. The man clamped to the groundline in Rauschenberg's image is Dante clamped to his destiny.

Sometimes Rauschenberg transforms the chief characters into symbols of the roles they play in the context of particular cantos. Such is canto XII in which Dante is transformed into Kennedy, Virgil becomes Stevenson, and below, in the river of blood with the other Violent Against their Neighbors — i.e. jingoist politicians — boils Nixon. Rauschenberg is of course being faithful to the poet who took considerable pains to place his living political opponents in *Inferno*. (I can hear them, standing in the Piazza della Signoria, excitedly discussing Dante's now inexplicable spite toward his erstwhile friend Guido Cavalcanti.)

Scholars call Dante a European man which for the time was tantamount to being an internationalist. Burckhardt further stresses his penchant for politics by calling him the first publicist. Dante was cosmopolitan in time and space. Internationalism and universalism: two chimerical ideals of the 14th and 20th centuries. Rauschenberg rises to the challenge in Dante's own terms by incorporating contemporary symbols such as Italian racing cars (half-machine, half-man to symbolize the rather frightening centaurs of Dante's imagination); American rockets; gas-masked African natives (the ridiculous demon squads in what Ciardi calls the gargoyle cantos) and Western-style dandies. Rauschenberg's diction is translatable in the piazzas of Italy and the swimming pools of Hollywood with equal ease. The eloquent common tongue which Dante was the first to value is artistically honored.

Devotee of the vernacular in visual terms, Rauschenberg matches Dante by carrying symbols both from the lexicon of his own past works and the new one imagined to meet the specific exigencies of this poem. He gives an equivalent of Dante's own method, and he is the first illustrator to do so. Dante, too, carried along important images and reiterated impressions of light, sound, touch throughout the cantos. Rauschenberg's book is not just an adaptation in modern dress but the most faithful possible exemplification of Dante's own method.

Rauschenberg's graphic inventions are legion. In order to cope with one aspect of Dante's poem — the iteration of sense impressions — he devised various abbreviated means. Since noise is paramount in most cantos, he establishes at the very beginning a thickly scribbled rain of pencilled lines as noise equivalent. For smells he has had to maneuver a bit, using among other images a stinking fish to match Dante's innumerable descriptions of vile stenches. When Dante discourses, as he does now and then, in abstract generalities, or when he tells a tale of inaction, Rauschenberg resorts to comic-strip techniques. He uses the balloon to indicate talk and occasionally he parodies the comic-strip convention for representing obscenities.

Letters and numbers abound in Rauschenberg's visual shorthand. When Pope Boniface asks Guido da Montefeltro his advice in Canto 27, the Pope's words "seemed drunken" to Guido. Rauschenberg cleverly synopsizes the whole description by drawing letters that appear to have been drawn from a gothic missal, thus conveying that an ecclesiastic is talking, and then warping and teetering the letters to suggest his drunkenness.

This might be a good point to return to an earlier remark concerning the element of social criticism in Rauschenberg's work. Dante made no bones about his own scorn for corrupt authority. In his time the Church was the great authority and he never flinched in cataloging abuses of the true faith. At times he quite relished it. In Canto 7, for instance, Dante asks Virgil if the people he sees are of the clergy. Indeed many were, his guide

replies, popes and cardinals in fact, "for it is in these that the weed of avarice sows its rankest weed." Here is the voice of Dante, moral and political vigilante, outraged by the behavior of the great authorities of his time.

Rauschenberg, however, lives in the 20th century when the Church is no longer so powerful in worldly affairs, presumably. He therefore transforms the clergymen into a modern symbol of corrupt power: the police.

Throughout Rauschenberg's illustrations are statements against militarism, political conflict, senseless patriotism and crass popular ideals, couched in the symbolic terms dear to Dante's heart.

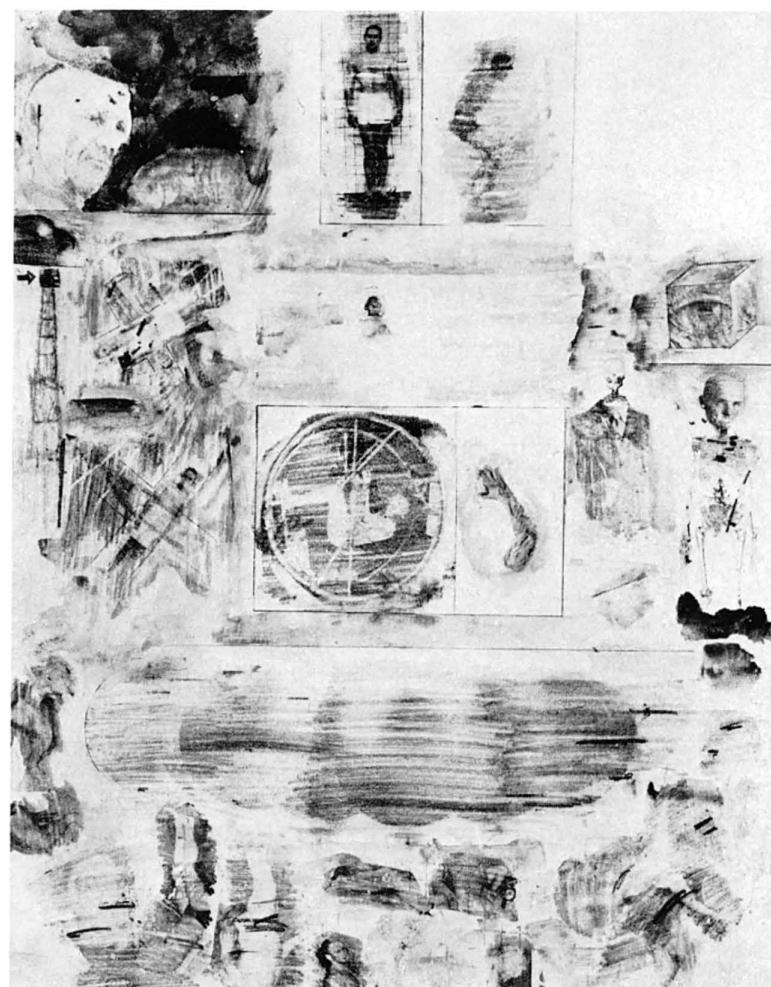
I don't mean to suggest that Rauschenberg used Dante as an instrument toward ends inimical with the poem. On the contrary, although he is not pedantically bound to the text, Rauschenberg has read it extremely closely and every major event is signalled in the drawings.

In order to indicate Rauschenberg's precision and thoroughness, I'll quote sections from my commentaries which reveal the wealth of thoughtful detail Rauschenberg accumulates;

For Canto II: . . . This is Dante's last firm stance. In the next frame the hurtling descent begins in earnest.

Flashback: Dante, somewhat coy, hesitates, telling Virgil of his fear and characterizing himself as a coward. This gives Virgil a cue for a splendid harangue. In effect he scolds Dante roundly. He recalls to Dante how the whole thing came about. Beatrice, it seems, came down to Limbo personally to enlist Virgil's help . . . R. shows Beatrice as an antique goddess, properly pedestalled as Dante wanted her to be. As she is a stranger to this nether-world, the frame is illuminated curiously, stressing the flashback quality of the sequence . . . Virgil describes his own enthusiastic reaction to Beatrice's commission and how he set forth immediately in pursuit of Dante. In R.'s transcription, Virgil becomes a running athlete (an arrow, the first of many stenographic signs, connects the second to the third and last fame.)

(Continued on page 37)



Robert Rauschenberg  
*Dante's Inferno, Canto XXXIII*  
Courtesy Leo Castelli Gallery

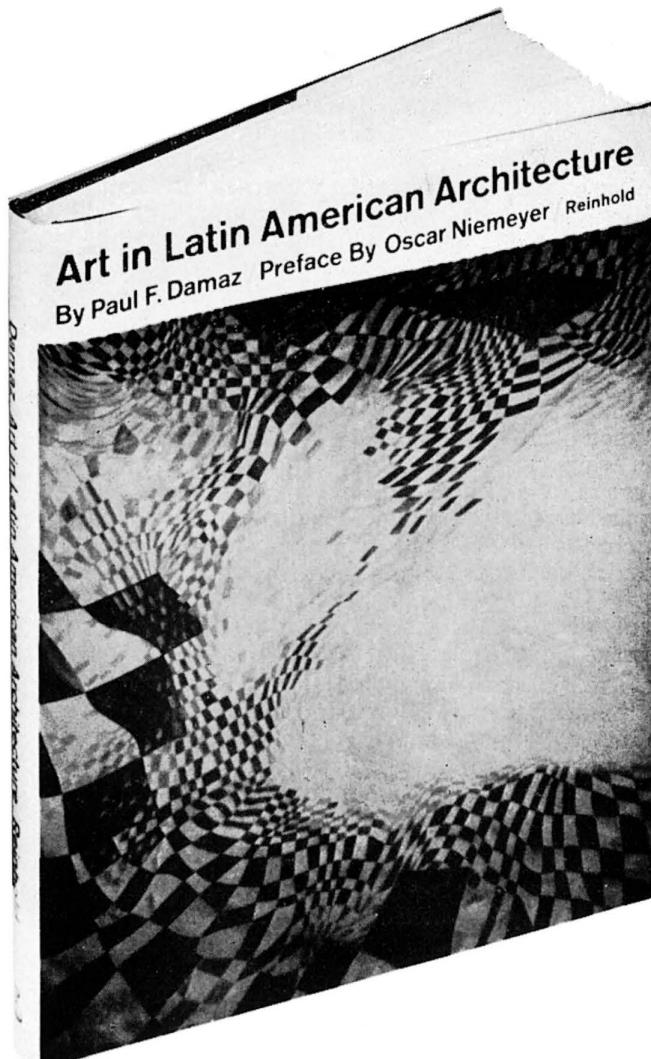
Drawing 14½" x 11".  
Photograph by Rudolph Burckhardt.

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There are conflicting views about how much the prolonged newspaper strike affected the art world, but one thing is certain: the absence of newspapers was directly responsible for the development of a rich new reproduction medium, the first vital development since lithography.

During the dog days of the strike, galleries found themselves without a means to advertise their shows. One dealer, Robert Graham, met the problem by asking his exhibiting artists to paint a large flag which he then hung outside the window of the gallery. The billowing advertisement amused and attracted passersby on Madison Avenue to such a degree that Graham began to reflect on the possibility of extending his idea. After all, he reasoned, in Paris there are kiosks for *affiches* and numerous places for cultural events to announce themselves, while in New York, except for the traditional flags in the theatre district, there is little possibility for public announcement. It's true that in a debased form banners, emblems, and flags have been used in gas stations, supermarkets, and newly opened delicatessens, but never to purvey the fine arts. Why shouldn't they be used to herald exhibitions?

Graham discussed the problem with Barbara Kulicke, wife of the painter-framemaker heir to the William Morris tradition. Just at that moment Mrs. Kulicke had been struggling with an exasperating problem of a different sort: where to find large, inexpensive yet good works of art for a series of 26 identical, ugly government buildings. The budget she had been given was inadequate. Paintings were out of the question and prints were either too small or too difficult to install due to glass and frame. But banners and flags . . .

It occurred to her that a banner could be reproduced just as a fine print, from an original design by the artist who would supervise the work of a professional flagmaker and then sign and number his edition. The result would be an original that could be transported simply by rolling it up in a tube. Mrs. Kulicke dreamed of ". . . multiple originals in grand scale. Banners full of symbolism, banners for fun. Idealism banners, pop banners, New York School banners, collage banners . . . Excelsior"

Her vision has come about. Soon the Graham gallery will present its first exhibition of flags and banners commissioned by them. They will be as large as five by seven feet, in editions of

20, and will range in materials from felt, nylon and plastic to silk which is stitched, appliqued, silk screened, or worked as collage. Mrs. Kulicke and Graham have also formed the Betsy Ross Flag and Banner Company which will commission another group of artists.

Perhaps the most appealing aspect of the flag and banner vogue is the excitement among artists quick to see historical parallels. The elaborate banners of the renaissance, still in use in the Corso del Palio in Sienna for instance, can now be translated into modern terms. Artists whose paintings lean toward emblematic or heraldic imagery anyway find their design easily adaptable. But even artists whose style is less rigorously definite have been inspired to try to find a means to exploit the medium. Since so many contemporary painters claim to have been inspired by Paolo Uccello — painters of exceedingly divergent tendencies — it stands to reason that the ornamental advantages of this modern tapestry version would excite them.

It is entirely in keeping with the Kulicke tradition that this medium emerges with their aid. Robert Kulicke has long been a one-man arts and crafts movement in New York. From the days when he first began to impress on his clients the need for appropriate frames, he has been preoccupied with the problem of sustaining hand crafts in a mechanical epoch. To my knowledge Kulicke is the only art historian of frames in America and his dedication to the ancient craft has meant much in the frame industry here. He has been able to buttress his arguments in favour of freshly designed frames for new images by drawing on his wealth of historical anecdote. (Such as the fact that Napoleon ordered the entire contents of the Louvre to be re-framed in the empire style, or that the craft of framemaking is two thousand years old, or that Marie Antoinette once paid \$3,000 in order to have the appropriate frame.)

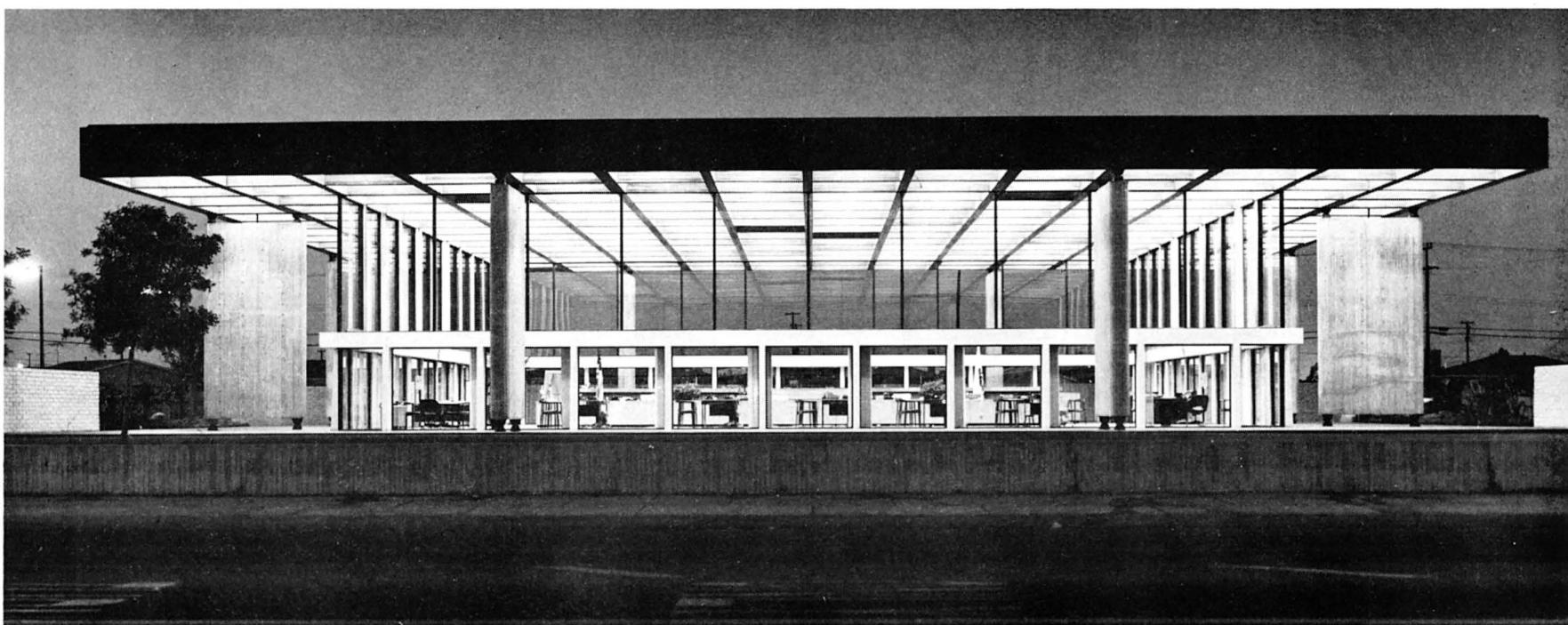
Kulicke's many interests extend to painting (his recent exhibition of tiny still lifes at the Allan Stone Gallery enchanted everyone) and to lost arts such as the art of enamelling and *cloisonne*. He is the prime mover in a flourishing revival which has attracted a wide circle of artists and amateurs, among them the playwright Jack Gelber. Some of the painters, among them Miriam Schapiro and Ron Gorchov, who only recently attacked the neglected craft have found remarkable ways to adapt it.

—DORE ASHTON

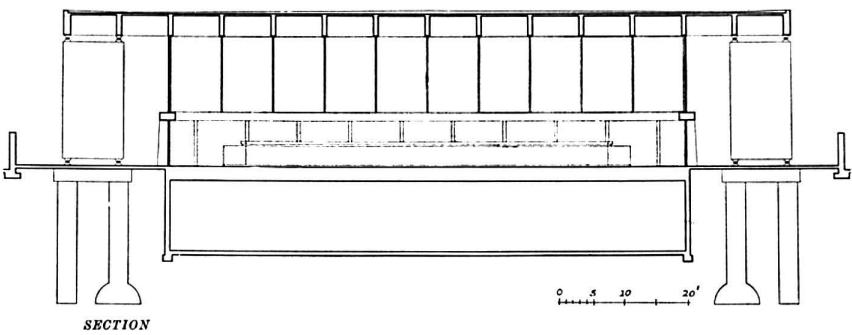


Eight concrete piers, which act as vertically cantilevered shear walls held by "pins" top and bottom, surmounted by a massive concrete grid roof frame this monumentally scaled branch office of Great Western Savings and Loan Association in Gardena, Calif. The building, set on a red quarry tile podium, has two 80' x 80' floors: the glass enclosed main floor, a single room containing banking facilities, and the basement containing a conference room, employee's lounge, washrooms, and air-conditioning equipment.

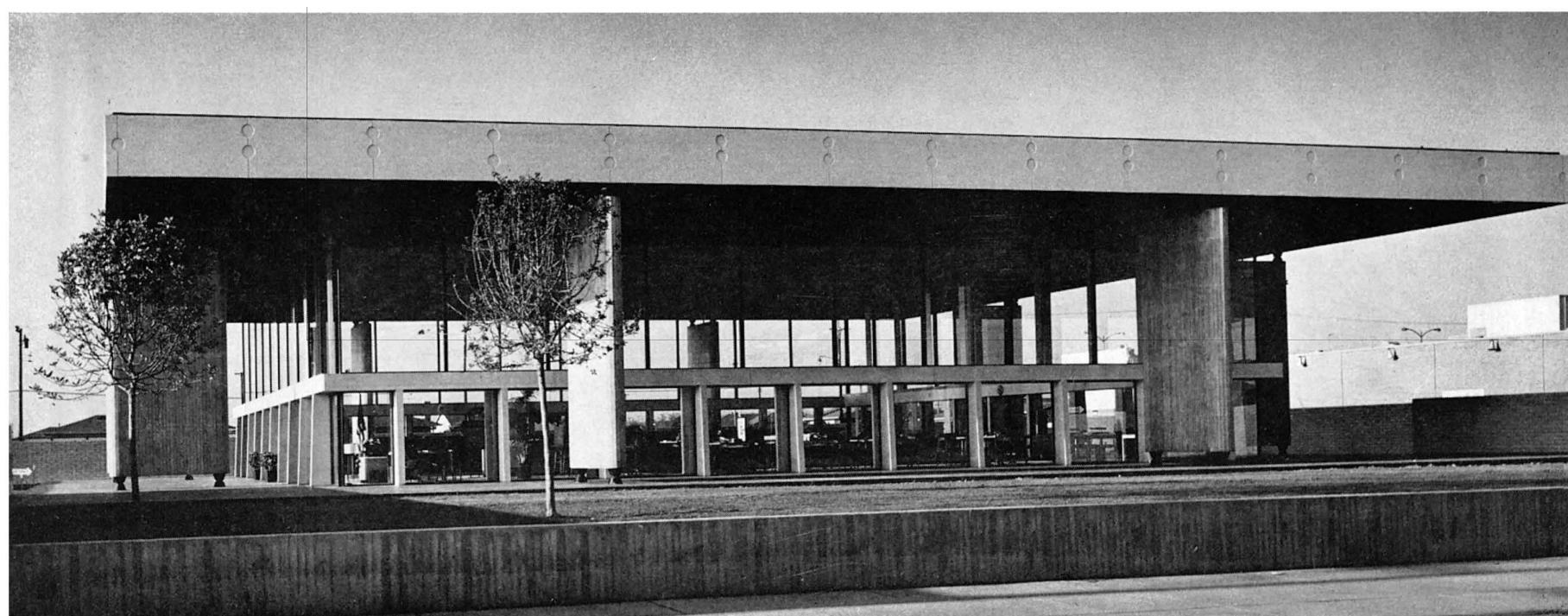
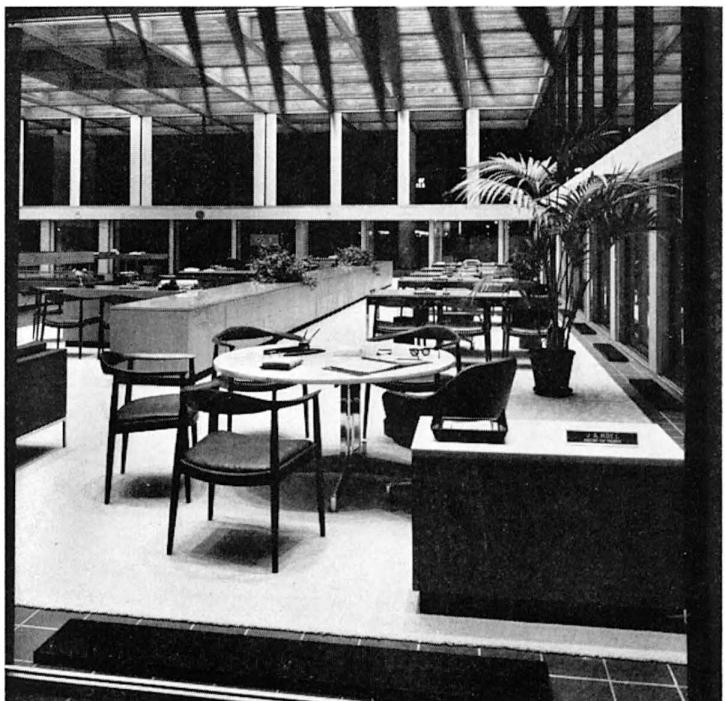
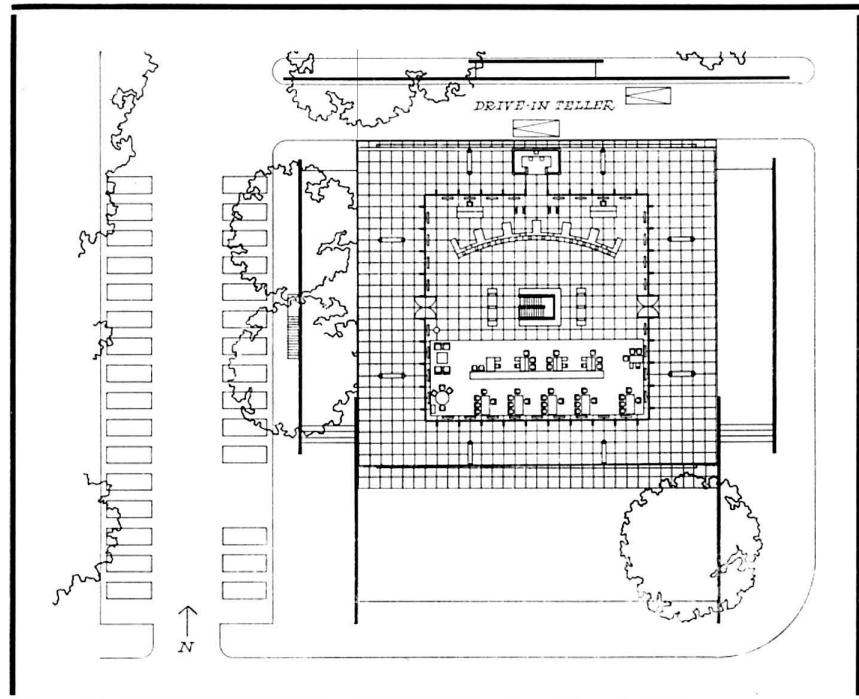
On the exterior, low, offset walls separate the building from parking lot and street, creating a terrace garden. The 112-foot-square roof (8-foot-square coffered grid) is 20' off the podium, spanning 96' between the piers. Beams contain post-tensioned tendons in both directions. The "pins" at the top are movable: ball and socket inner pins are capable of rotation in any direction; outer pins permit movement vertically. Cost of construction was \$540,000 including terrace and parking and figures at \$33 a square foot.

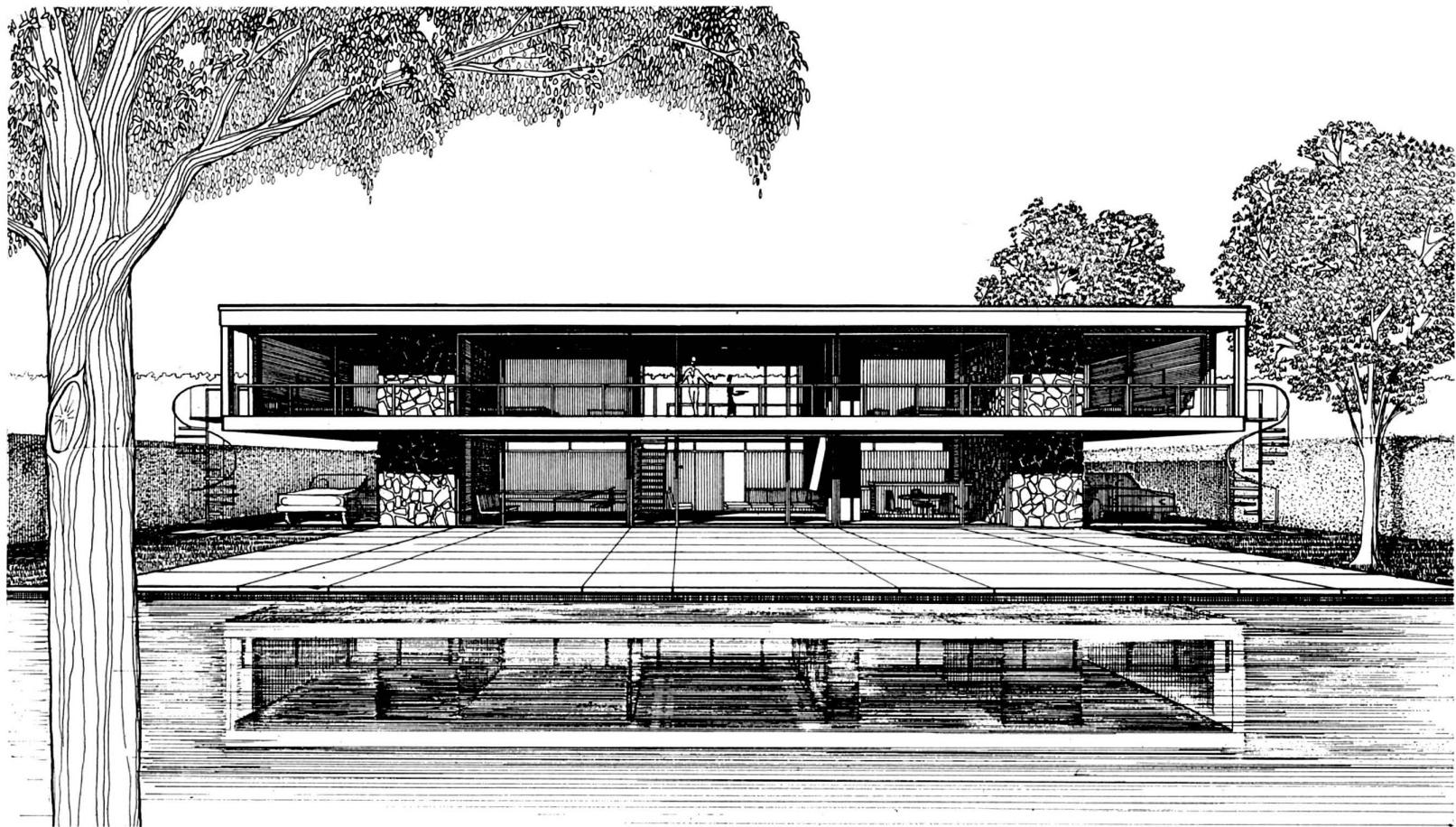


JOHN O. MERRILL AND ROBERT E. ALEXANDER PARTNERS IN CHARGE OF THE PROJECT

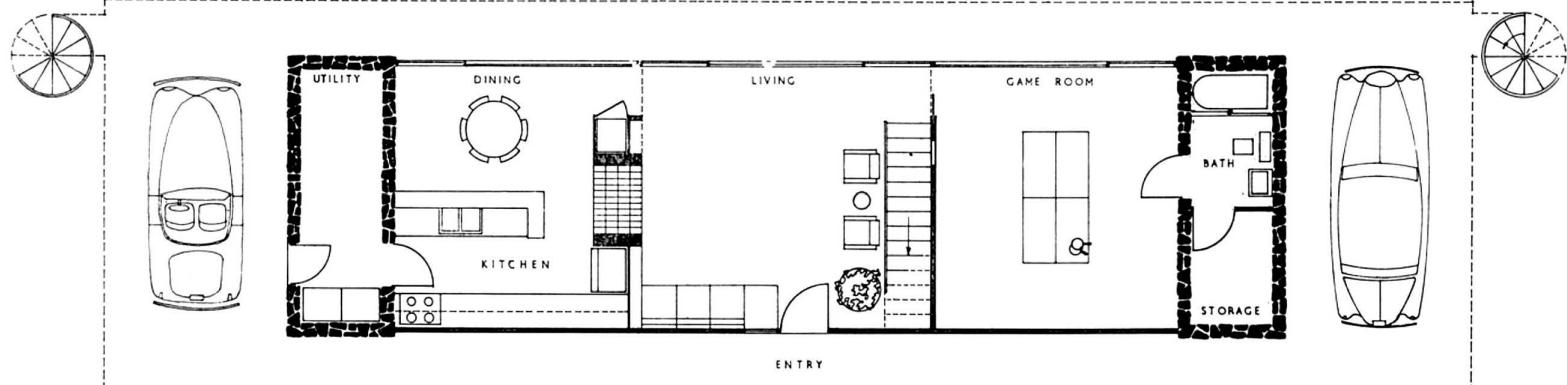


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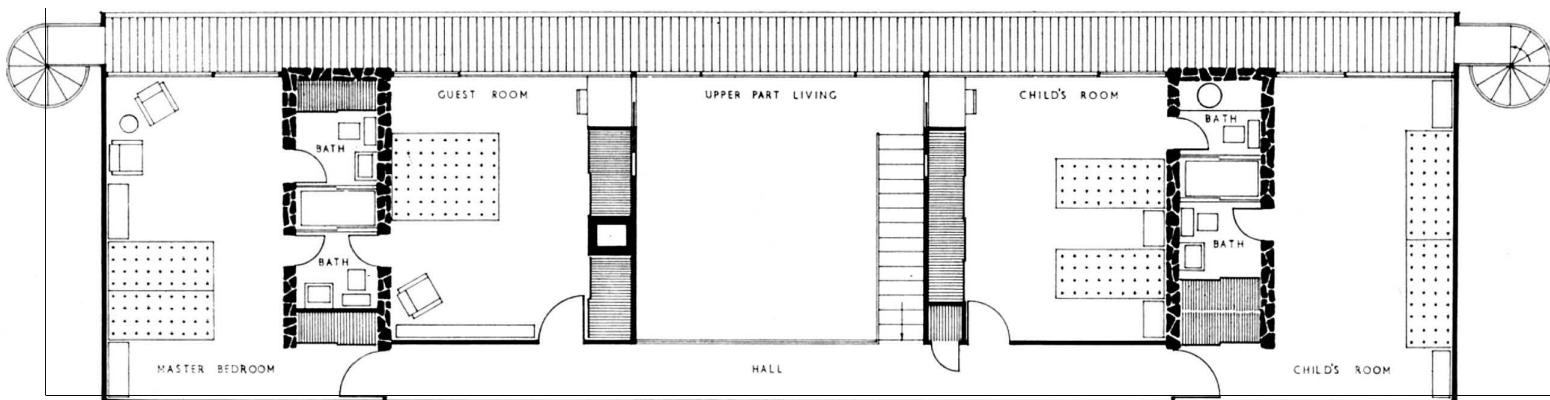
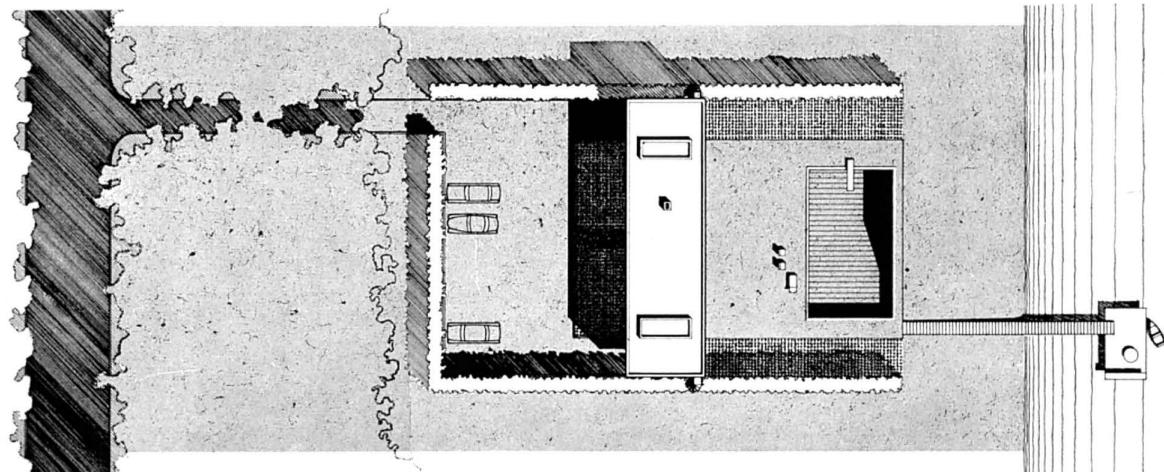
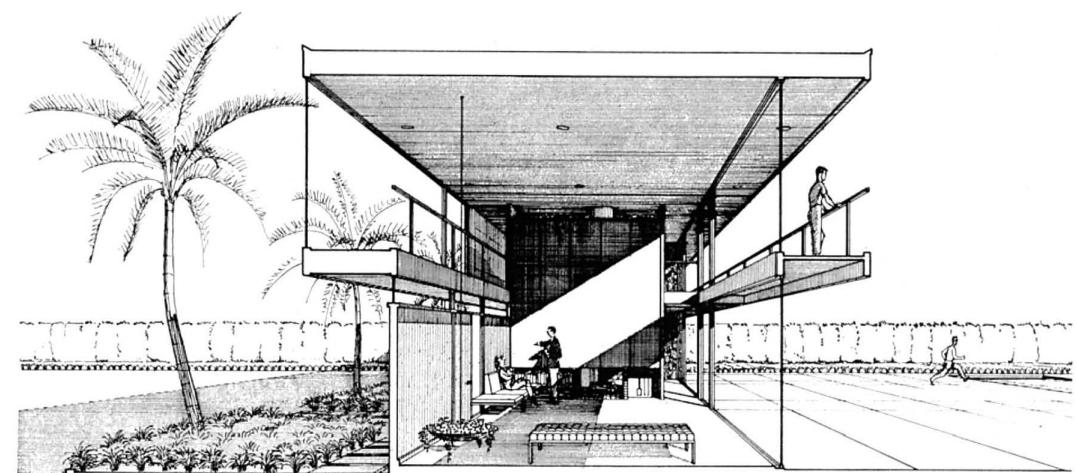
HOUSE IN JACKSONVILLE, FLORIDA, BY WILLIAM MORGAN, ARCHITECT



The clients asked that this house on Big Pottsburg Creek near Jacksonville, Fla., have a view of the water, direct access to the existing swimming pool from every room, a broad paved court for outdoor activities and entertaining, and a dock for boating. The property, on the west shore, is 100' x 400'.

Entry will be beneath a seven-and-a-half-foot-high balcony into the two-story living room, sixteen feet in height, which will be open to the second story balcony to the east and glass walled hall to the west. Flanking second floor rooms will have sliding panels permitting a view into the living room.

Stone towers at either end of the house will support the building and enclose mechanical equipment and bathrooms. Steel frame roof members will cantilever twelve feet north and south, supporting the second floor by hanger rods. Wood joists and studs are to enclose the second story. The first floor, a concrete slab on grade, will have a Botticino terrazzo finish. Ceilings and walls are to be gypsum wall board except in the walnut paneled living room and ceramic tile baths. Roofing will be built up tar and gravel, and exterior siding is to be texture one-eleven abraded cedar plywood. Construction contracts total \$25,000.



We should all feel a sense of exultation as we come together to dedicate this building [Tom and Ann Peppers Art Gallery, Univ. of Redlands], for it, like others that are rising on a number of campuses in America, is at once an admission that we have not done as well by the arts as we might have done and an affirmation that universities, and here we must say particularly this university, intend to do better. To all this one can only murmur "Amen".

The relatively bad state of the arts in American universities and colleges is the result on the one hand of the general attitude of the people of our country towards the arts and on the other of the excessive intellectualization and verbalization that has characterized universities everywhere since they began.

I think national attitudes are changing very slowly, if at all. Mass media discuss art, of course, and in so far as it is fashionable and smart to own some objects of art, to attend the plays of Bertolt Brecht, and so on, there are what could loosely be called "movements". We must not, however, be overimpressed by the statistics of record sales or those of paperbacked books. There is now certainly, now that we are numerous

the Spartans, it was surely Pericles who made Athens worth preserving. This states the dilemma.

You must be worth saving, but you must also be savable. And there cannot be much to save when you are dead—or even hungry. That is why the doctrine of Aristides echoes down the ages, turning up much later in Nietzsche, "He who prefers the beautiful to the useful in life will, undoubtedly, like children who prefer sweetmeats to bread, destroy his digestion and acquire a very fretful outlook on the world." He might have predicted worse. The view is a pragmatic one, an American one. It is what gets us physically comfortable, and spiritually uncomfortable, Hilton hotels in Istanbul, Athens or London. It is why John Adams and his successors were always for deferring the arts until we could afford them—a time which, like tomorrow, has never quite come. It is why young scientists are excused from the draft but not young artists—because our admiration of science is practical. It is not based on any sensitivity to the aesthetics or the morality of science, which are splendid when perceived divorced from utility. It explains, I think, why the patronage of art has not been strong enough because it has been too private.

down into the nineteenth century, but often what they talked about began to seem trivial and other media of communication superseded them for the main public service. But they remain, when they are at their best, a powerful means of saying things that sometimes cannot really be said in any other way. In this evolution, however, it became easy for Americans to look at the arts merely as toys, as embellishments, as something which serious people could do without—as they cannot do without spacemen and missiles and highways and the breathless daily news of radio and television.

I am not going to try in this hall to prove how absurd this is—nor could I, perhaps, succeed. I am going to take it only as a matter of course that America can afford to be more generous, even lavish, about the arts than it has been, and that it must go about this in a quiet growing way since nothing will be accomplished by manifestoes, and munificent pump-priming such as science has received is just not to be expected. Our more specific problem here is, then, what can our universities contribute to this quiet growth? We can perhaps see this best by noticing what they have generally failed to do.

What they have failed to do is all too patent.

## HOW LONG IS ART?

I mean private, of course, in our own special enterprise sense. The Mogul kings were individuals and the public did not penetrate into and diffuse itself throughout their palaces. Yet their architecture was in a larger sense public architecture as all government art should become—and all ecclesiastical art, too. In the world's art, government and the church have always been the great potential patrons. The American church has largely been either against art or pervaded by tepid and lachrymose taste. Even our nice contemporary churches lack the vigor of those of Germany, Italy and France. And in the United States we have been very cautious about mixing the government into the arts, fearing no doubt what even Shakespeare feared when he spoke in the Sixty-sixth Sonnet of "art made tongue-tied by authority," fearing perhaps the taste of legislators or even of presidents (and on the record with some justification), fearing maybe that art would die if afforded the treatment described by James Jeffrey Roche in the V-A-S-E, where

"All loved Art in a seemly way

With an earnest soul and a capital A," or perhaps only remembering the earnest absurdities and incompetencies of Art a la WPA. But most of all, I am sure, it is because we don't want to spend tax money on anything, really, and certainly on nothing "useless". In this view no highway is useless and no work of art is useful. A compelling example of what we are likely to approve is the ugly but commercially successful exposition Robert Moses is spawning in New York, which he, if not the world, will call a World's Fair. Moses scorns artists and critics—and gets things done.

It was not always so for the arts of painting and sculpture, at least in other places. They were clearly useful in a very practical sense when primitive men believed them to have magical properties. They remained useful to the clerics of the Middle Ages when they performed major didactic services for a population which could not read. They continued to serve as a powerful if less central medium of communication well

They have managed to deliver graduates who can loosely be said to be literate though few write well, and the more scholarly ones usually write badly. But this skill, such as it is, is almost all involved in words. Students have not made as much effort, they have not been asked to make as much effort, to learn how to see. And that they cannot see is evidenced by their inability to report with any accuracy something that just happened before their eyes, or by their taste in dress, house decoration, and automobiles, or by the fact that they can walk or ride through their cities and especially the peripheries of their cities without dismay. If they have learned anything about using the eye, it has been how to ignore its aesthetic messages.

Universities and colleges have imposed no requirements for seeing; they have rarely provided a handsome environment in which to study; they have not really found ways to make painters, sculptors, poets, at home and useful on the campus. The universities and their faculties have not often been crusaders for the arts; and even when they have, most of the crusading has been verbal. Henry VIII did better by a few English universities. Venezuela has made the University of Caracas a fine example of the coalition of architecture and sculpture and painting and gardens and study and life. But there are no such examples in the American university, really—a few fine buildings here and there, a few fine collections of painting, but very few, and almost no first-class sculpture. There is, however, on some campuses a good deal of talk about art in lecture halls if not in student commons or faculty clubs.

There is a long historical reason for this. Universities early accepted the dictum of the inscription standing on Coster's house in Haarlem: "Memoriae sacrum typographia ars artium omnium conservatrix."

Printing the preserver of all the arts, indeed! As there were brave men before Agamemnon, so there was art before Gutenberg. But most corners of the university are prone to forget this.

Universities, too, have a form of sternness

The reasons are pretty deep in our culture. I do not want to try to be learned or exhaustive about them here. They are rooted in admiration for the economic man, in residues of a misunderstood Puritanism, in Emersonian transcendental rejections of the decayed past which had so much art.

The musings of the practical mind are not, of course, exclusively American. Aristides the Just is supposed to have said that "neither walls, theatres, porches nor senseless equipages, make states, but men who are able to rely upon themselves." Not many Athenian contemporaries agreed save Themistocles, and perhaps Thucydides, but while Themistocles did more to preserve Greece against

about them, in aspiration, however muted, towards ascetism. The dons may have feared that art might act as Oscar Wilde demanded when he said "It is . . . through Art and Art only that we can shield ourselves from the sordid perils of actual existence." It may not be notorious that professors have a great lust for sensuous life but the life of what they call the mind can tolerate neither shielding from reality as Wilde demanded nor stimulation of the senses as opposed to the intelligence. Some like Mr. James B. Conant feel the study of art "too soft" to be a serious concern of our schools. Others may feel of art as William Collins did about the plays of Ben Johnson:

"Too nicely Johnson knew the critic's part;  
Nature in him was almost lost in Art."

That is, art may seem to the dons perhaps deceptive and at least artificial. But there has also been, no doubt, the fear lest it be fun. As Pope put it,

"Some to church repair,  
Not for the doctrine but the music there."

And that would not do.

Of course there have been many writers and artists, especially in Victorian days, who went out

"Et d'avoir, moi, le coq, fait elever le soleil."  
("I recoil, dazzled, to see myself all rosy red and to have, I, myself, the rooster, caused the sun to rise.")

Yet the artists felt the same way about the professors who seemed to them to be saying that the explication was more important than the poem, that it was the professor, not the painter, who had caused the sun to rise.

On the other hand, the professors have some reason to suspect these "truths" of the artist, especially when they are expressed (and they often are) as paradoxically as the words of Picasso, "l'exactitude n'est pas la verite." We all know that art is not truth. Art is a lie that makes us realize truth, at least truth that is given us to understand."

It was inevitable, too, that the professors should value the intellectual above the intuitive to the point where intuition, unless later proved to be correct as it sometimes can be in science, constituted a scant recommendation for promotion. It was inevitable, too, that the professors should examine the arts as critics and historians rather than as fellow artists. This was on the whole just as well. Artists are not good observers of each

creating fashions in taste for those who have none and whose buying is based far more on market values or on being up-to-date than on any real understanding of or interest in art. When there are no governmental patrons, when the church and the cultural institutions are indifferent patrons, the artist who needs patronage will turn to the private citizen and his art will sooner or later be slanted thereby, perhaps even corrupted. It is a complication of our day which has been maturing ever since painters, for example, left the walls and turned to the easels, but the corruption is relatively recent. It is inevitable in the absence of a sounder general understanding of the arts and here the universities could perform a great educational service if they could find out how to do it.

I do not know that artists have lost much by not being in universities, or that university faculties have lost by their absence, for individual professors, especially in urban centers, could hobnob with artists and their products if they wanted to; not many have seemed to want to. But I am confident that the student has suffered—suffered from inadequate opportunities to see first-class art in its original form and in the right place; from

By JOHN E. BURCHARD Dean of Humanities and Social Science, Massachusetts Institute of Technology

of their way to assert that art is a way to truth—that it must be truthful or it is nothing. Carlyle insisted that if the fine arts divorced themselves from truth they would fall mad, if they did not die. He repeated this idea in his Inaugural Address as Rector of Edinburgh University in 1866 when he asked if there could be a more horrid object in existence than an eloquent man not speaking the truth. Amiel insisted in his *Journal* that "Truth . . . is the highest summit of art and of life." Ruskin proclaimed the doctrine incessantly—"Fine art is that in which the hand, the head, and the heart of man go together."

To all this the artists generally agreed. They were happy to be known as truth-bearers. But what were these truths? They had no quantitative conviction. They were not the truths that later came out of the laboratories after the word-men had been forced to let science in. They were not open to proof. It is ironic that all these truthful men of the universities have managed to stomach the intuitive statements even of sociologists and psychologists, calling them "profound insights," while dreading the havoc promised were they really to embrace artists. In this, of course, the academic men have shown an arrogance of their own, the unwitting arrogance of the verbalist who thinks "intellectual" the highest word of praise, but they have done no more than match the arrogance of the artists. There were, for example, the claims of Robert Browning,

"It is the glory and the good of Art,  
That Art remains the one way possible  
Of speaking truth."

A very common claim by artists. There was the gentle setting off of the special people as Elizabeth Barrett Browning did it:

"Earth's crammed with heaven,  
And every common bush afire with God;  
And only he who sees takes off his shoes—  
The rest sit round it and pluck blackberries."

Not all artists have been so quiet; many sound like Rostand's Chanticler:

"Je recule  
Ebloui de me voir moi-même tout vermeil

others' work and should not be, and work worth doing is worth examining though it can be over-analyzed and interpreted, to the point where the interpreter discovers things that are not there. Dorothy Sayers once remarked of Dante, "Great poets mean what they say." It is worth remembering. But critics and historians have a wide range of comparative material to use when they are wise and have some sense of proportion, and of relative importance. Artists should not have this sense. They must believe they are showered with God's talent and must fly against the probabilities, which are that only a few of them are worthy of notice now and almost none will be remembered by posterity—while some might be happier unremembered. When historians and critics say these things, they naturally prick the egos of the artists who like them no better than the bull in the arena likes the *picadores*. There should be this consoling difference to the artist, that though he, like the bull, may bleed at the pricks, there is no record in the history of the arts where a critic-torero has in the end slain a brave bull. Nonetheless artists do not like it—who would?—and their retort has always been to assert the untrue—that all critics are men who have failed in the arts. Nearly every artist has said this at one time or another, and not many have, like Shelley, admitted a few exceptions. A contemporary architect of talent who has been spared the pungent criticism leveled at some of his peers nonetheless reveals his intuitive recoil by talking of "the polished pretenses of historians," while at the same time discussing the creative process and the difficulties of creation on the assumption that all artistic work, successful or unsuccessful, is creative while critical and historical work is inevitably uncreative. All this simply points up how difficult it has been to find a place for artists in universities, and how hard to keep them happy and productive there when a place has been made.

The contemporary situation in the arts is further complicated by the fact that for every serious critic and historian there are a dozen journalists and merchants of art writing vigorously,

inadequate opportunities to see artists at work in an unartificial context; from inadequate opportunities to try to work at art as an amateur as well as a pre-professional; from inadequate requirements that he somehow learn to see as well as to read; and in art courses he has suffered from a surfeit of words. When the student was lost, the patron was lost; and when the patron was lost, the chance for a vast blooming of the arts in America has at least been delayed.

This brings me to my title, which need not engage us heavily. It comes of course from the old saw attributed to Hippocrates as his first Aphorism, "Ars longa, vita brevis." He did not tell us what he meant and one interpretation, at least, is that art outlives the artist or the men of its time or even the men of many times. This is obviously the fact for some art, and it might be taken as a necessity for great art that it have such durability. And from this one could draw the more dubious conclusion that art was more important than life—an absurdity, of course, since art is meaningless without living people to see it or hear it.

But we need not fly so high. For the purposes of this talk I am interested in a lesser interpretation which has been voiced many times. It rests on the idea that it is hard for an individual to accomplish much in the arts since the arts do require skill, skill is hard to attain, and the artist's life is short. Pope insisted on this in his *Essay on Criticism*,

"True ease in writing comes from art,  
not chance,

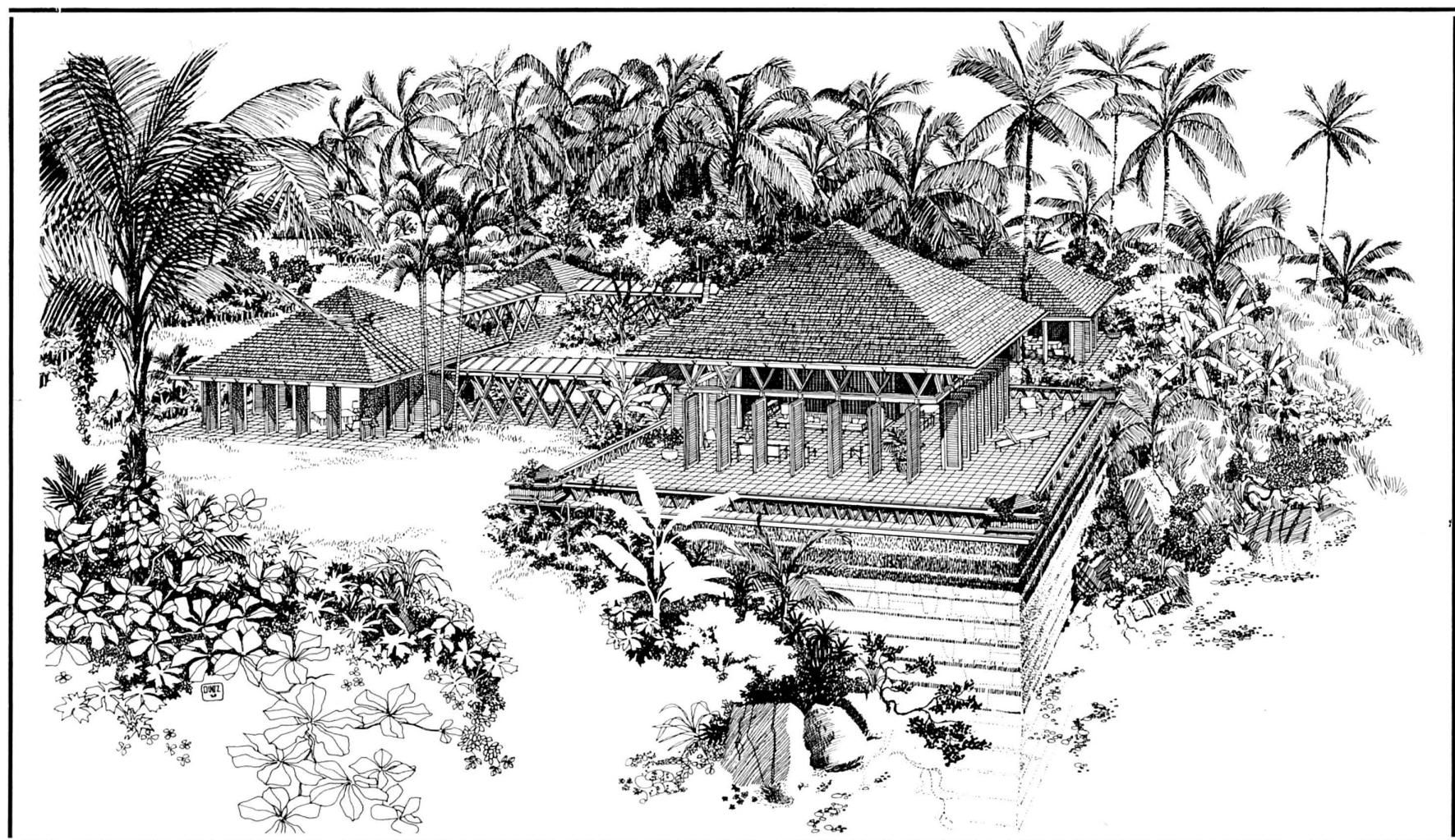
As those move easier who have learned  
to dance."

Longfellow remembered better times, as many of us do today:

"In the elder days of Art,  
Builders wrought with greatest care  
Each minute and unseen part;  
For the Gods see everywhere."

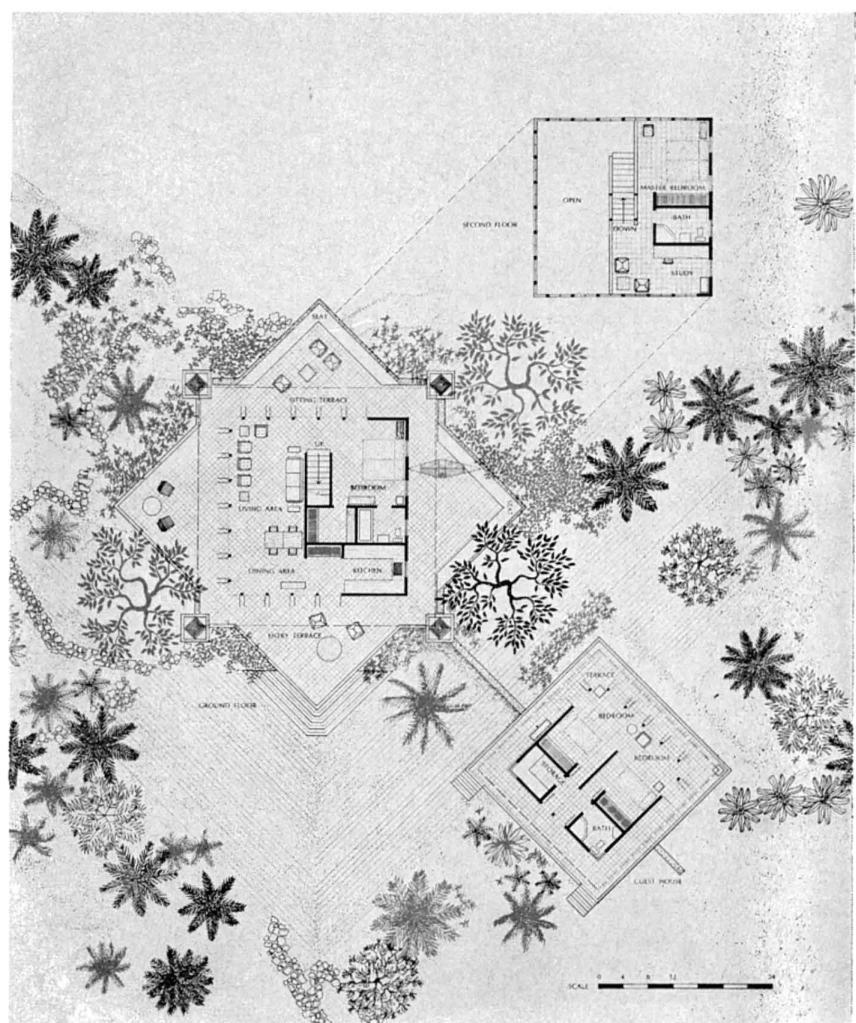
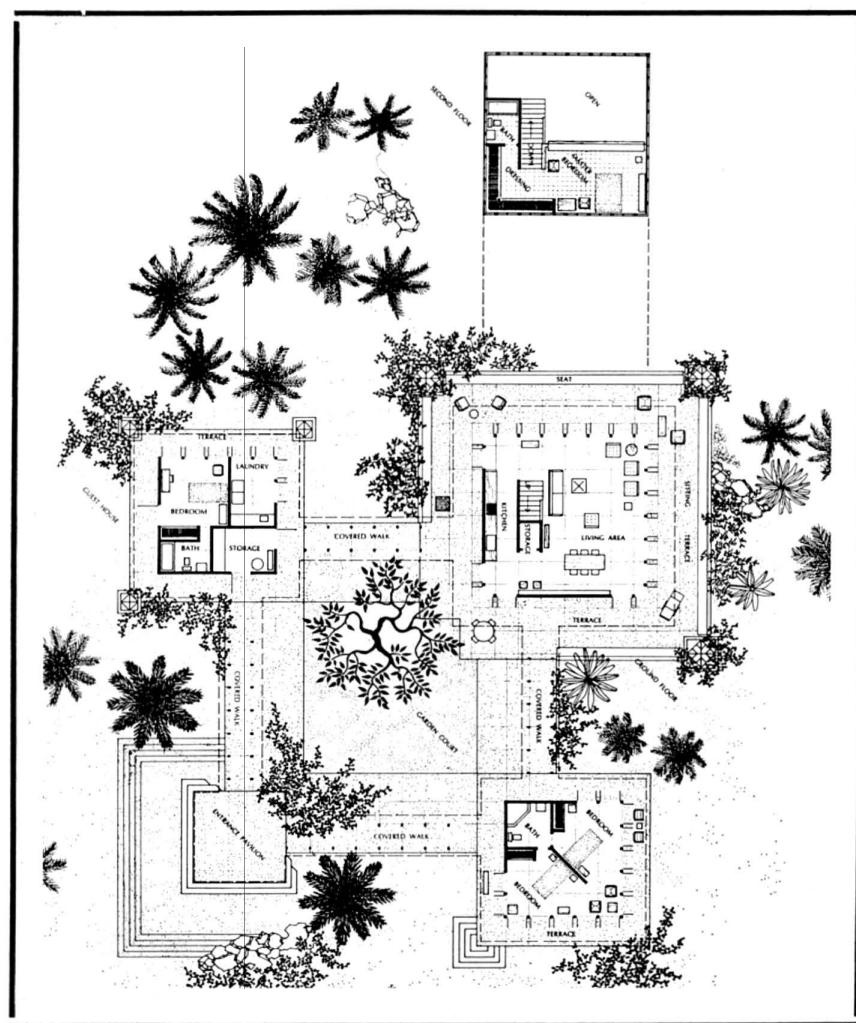
But it is not a recent interpretation. Chaucer believed it, too. He begins *Parlement of Foules* with the complaint, "The lyf so short, the craft so long to lærne."

(Continued on page 35)



NAVY ISLAND DEVELOPMENT BY ALFRED BROWNING PARKER, ARCHITECT



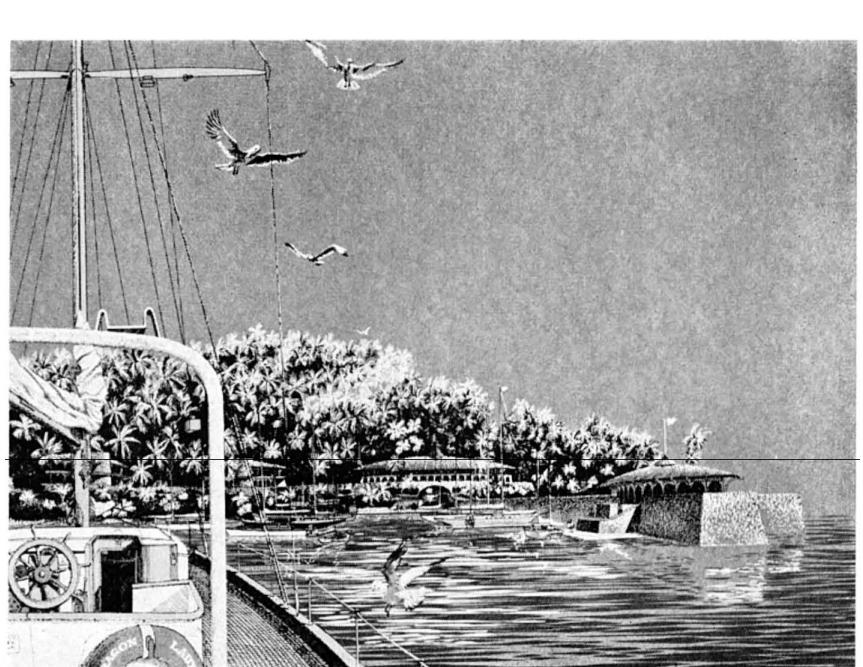
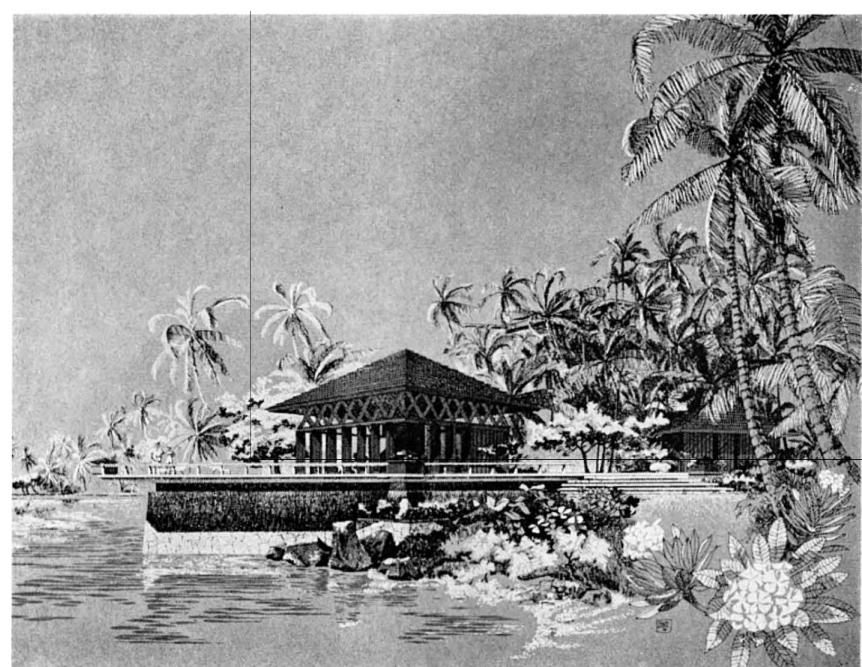


The architect was asked to develop a comprehensive land use plan for an uninhabited 60-acre Caribbean island 100 yards off the north coast of Jamaica. Roads and building sites have been laid out with care to preserve natural vegetation (lush) and land contours (gentle slope) of Navy Island. The marina and yacht club site was selected for the protection it afforded from the prevailing north easterly winds and seas. The proposed hotel area was chosen because of the view and nearby beach area. The remainder of the island has been planned for residences interspersed with park areas. No cars will be permitted on the island.

The residential sites average a half-acre in size and the houses themselves are to be constructed of native materials and designed with the

tropical island environment in mind. The yacht club and marina will include fueling pier, docks, club building with dining room, kitchen and lounge; and a group of shore apartments for the boatmen. (The form of the buildings was derived from the chiton, a mollusk.) The hotel has only been blocked in to indicate its site and will be designed at a later stage in the island's development.

All utilities — water, power and telephone — are to be brought in under water and underground in order to disturb the natural growth and configuration of the island as little as possible. Building costs in the area are comparable to those in the U.S. and the typical houses shown are estimated at \$12 to \$16 a foot.



## STRUCTURES OF WARPED SURFACES BY EDUARDO F. CATALANO

The Hyperbolic Paraboloid, a double-curved surface generated by the displacement of a straight line, and commonly described as a saddle shape, has become the unit-theme of many structures built all over the world during the last decade. The first known structural development based upon such units was introduced in France by Bernard Laffaille in 1933.

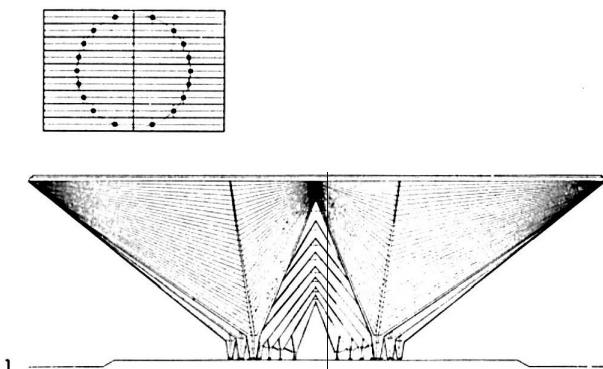
In 1936, the French engineer F. Aimond published the most complete study ever made on the subject called *Treatise on the Statics of Hyperbolic Paraboloid Shells not Stiff in Bending*. This study covers a structural analysis of these warped surfaces, as well as both simple and elaborate geometrical combinations of Hyperbolic Paraboloid units to enclose varied spaces. During the same year, L. Issenmann Pilarski, in his book *Calcule des Voiles Minces en Beton Arme*, published by Dunod in Paris, France, included part of the studies made by Laffaille and Aimond, thus completing the original bibliography on the subject.

Although the Hyperbolic Paraboloid had been well known as a geo-

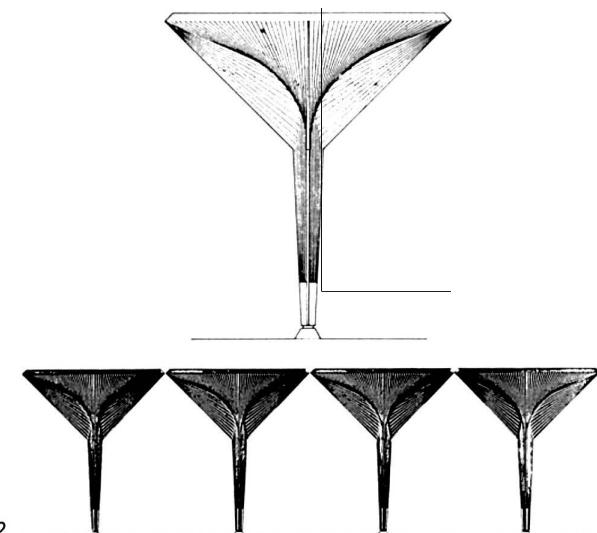
metric surface, it was not used until 1933 as a structure. Only Antonio Gaudi, the Spanish architect, saw the architectural and structural possibilities of such surfaces, before Laffaille and Aimond. In the basement of La Sagrada Familia, Gaudi's unfinished church in Barcelona, Spain, there are two plaster models of structures formed by three rhomboidal units of Hyperbolic Paraboloids, combined in a hexagonal plan. They are advanced for the period in which they were conceived, and constitute perhaps the best examples of Gaudi's structural ideas.

After the first structures were built by Laffaille, the Italian engineer Giorgio Baroni built several industrial roofs using units of Hyperbolic Paraboloids for the Alfa Romeo factory in Italy. The impact of these constructions was reduced, unfortunately, due to the outbreak of the Second World War, which completely paralyzed all civil construction in Europe.

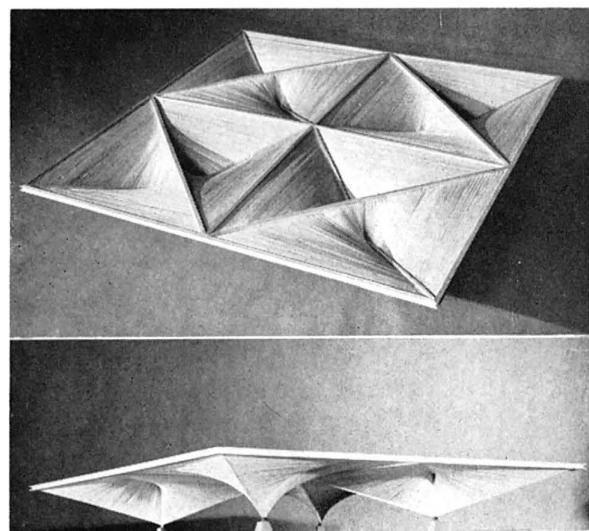
The rebirth of the Hyperbolic Paraboloid came in 1950, when it was used as a saddle-shape in the Cosmic Ray Pavilion of the University City



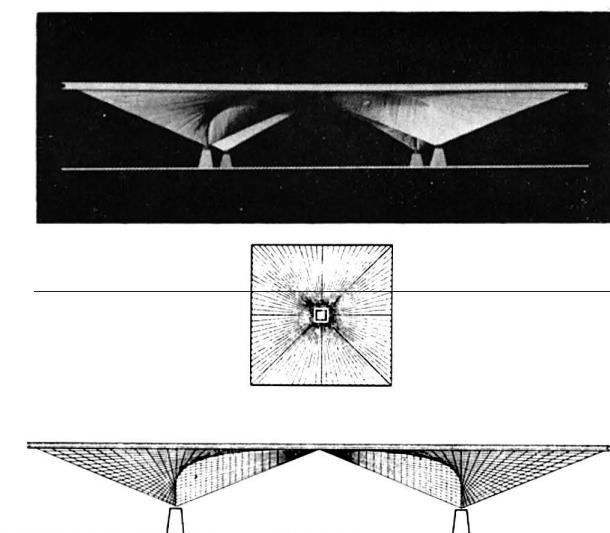
Plan and view of a group of eighteen structural units with their supports displaced in order to be grouped around a circular plan. Although the units are asymmetric, the resultant combination of them originates a symmetric structure.



Structure originated by combining eight units around a central support. The basic geometric difference that this structure presents in relation to the one above is based upon the slope of the adjacent edges of the units and in the position of the central support.



Two views of the structure described in 4. A different visual quality can be obtained by rotating each structural unit ninety degrees, around its support.



Elevations and plan of a structure formed by four equal structural units. Each one of these is originated by combining four units of a Hyperbolic Paraboloid with their common edges coinciding with the vertical axis of the central support.

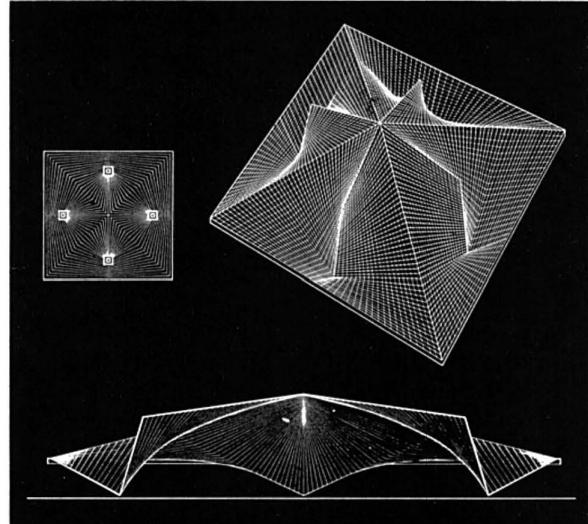
of Mexico. This construction constitutes the beginning of uninterrupted structural developments by the Spanish architect, Felix Candela. With the persistence present in the best builders' tradition, and with his constant exploration of the structural and visual richness of the Hyperbolic Paraboloid, he has made a lasting contribution to the art of construction.

The material published here is based upon studies made by the author since 1952 as a part of his courses in architectural design at the School of Design in Raleigh, North Carolina, and later at the School of Architecture and Planning at the Massachusetts Institute of Technology in Cambridge. Some of these studies were developed by students in their attempt to understand the geometric, structural, and architectural characteristics that result from the combination of Hyperbolic Paraboloid units, through the construction of models in varied materials, techniques, and scales.

The accompanying illustrations attempt to convey to the reader how combinations of these nonplanar, four-sided surfaces of great structural efficiency can create almost endless architectural spatial relationships.

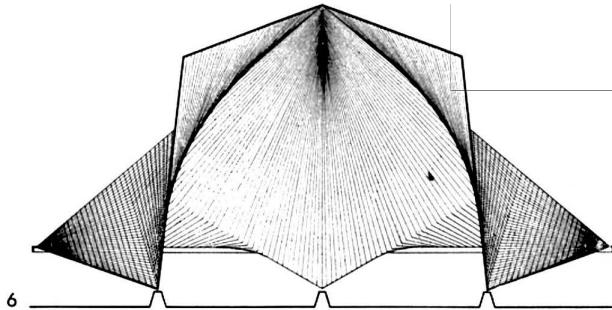
We hope that those who may be interested in these forms for architectural use do not blindly translate them into buildings. Here, they purposely have been represented solely as three dimensional organizations of the four-sided units, independent of the lengths of their sides; of the angles formed by their sides; of their curvatures; materials and surface treatment; and independent of their scale in relation to any element of reference or to any given environment. Misinterpretation of these variables undoubtedly will transform a potentially valid visual event into an actual visual offense.

EDUARDO F. CATALANO, Professor of Architecture in the School of Architecture and Planning at Massachusetts Institute of Technology. Special acknowledgement is given to the following students at M.I.T. for their contribution of the models and photographs: Thomas Blood, Leonard Saulnier, Ki Suh Park, Ralph Morrill, Robert Chester, Elizabeth Ross, Roger Marshall, Richard Painter, Alan Cooper, Raymond DeLucia and Dorothy Ginsberg. Illustrations: Gloria Catalano, Ralph Knowles, Richard Leaman, Paul Shimamoto and Roger Jackson.



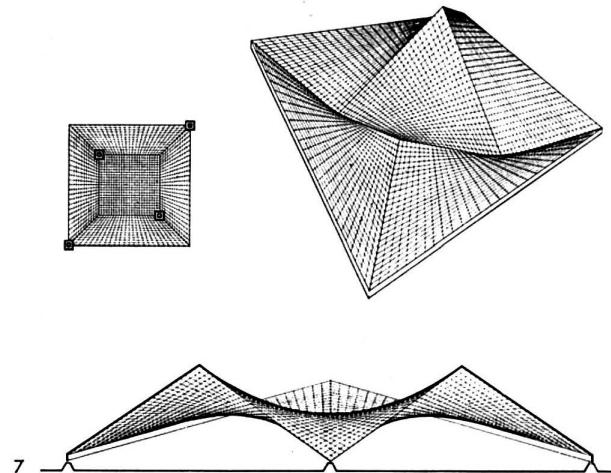
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Plan, view, and transversal section of a structure originated by the combination of sixteen units resting on four supports recessed from the straight horizontal edges.

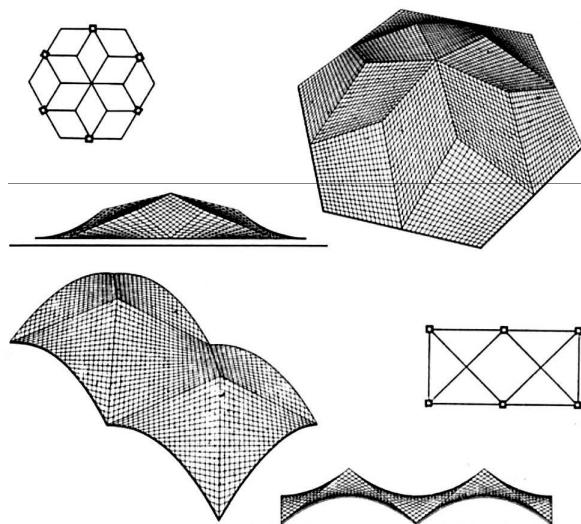


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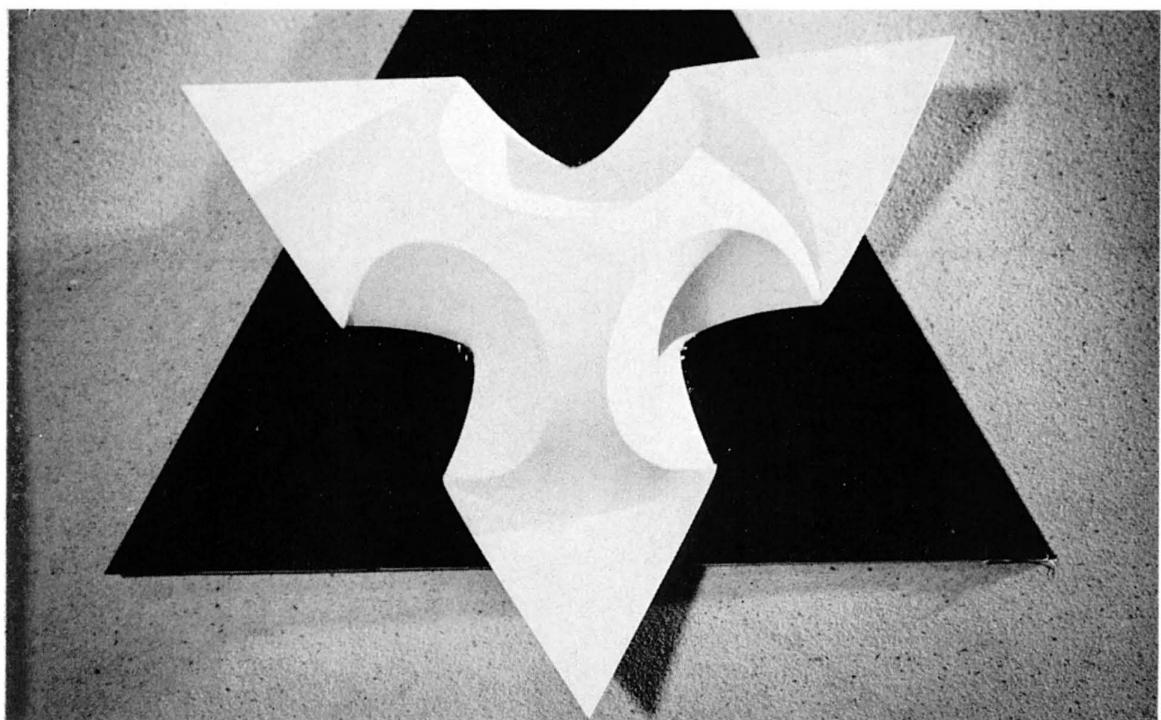
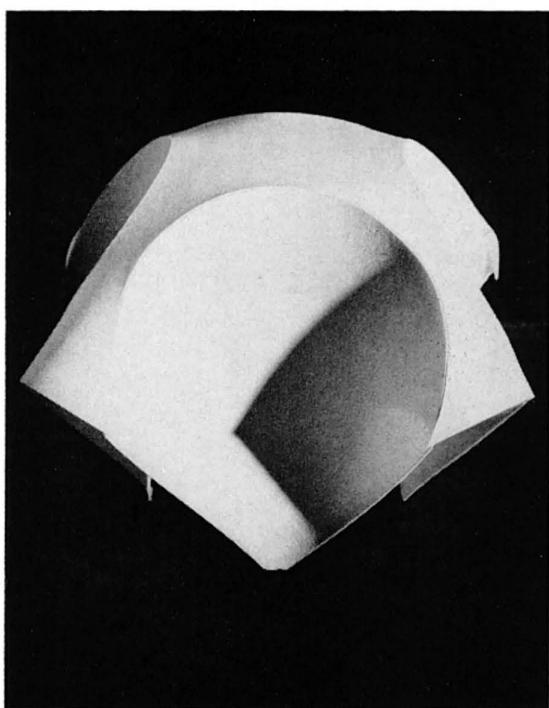
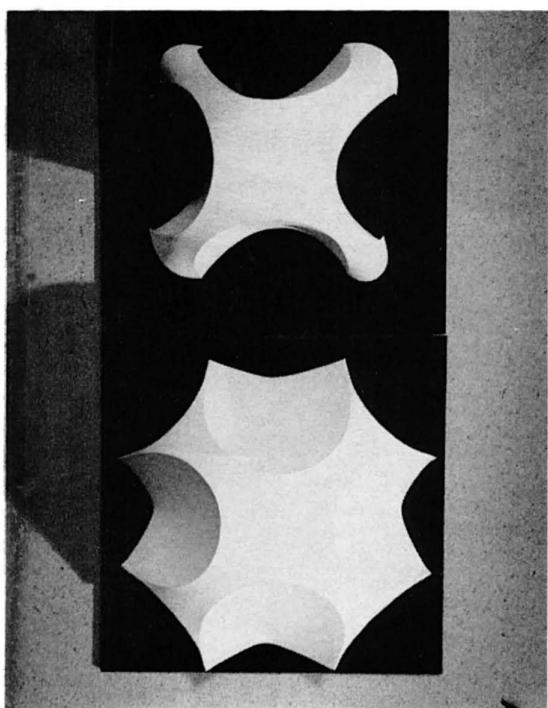
Section of a structure based upon the same combination of units as the structure shown in 5, but with an increased vertical dimension for its central space. It shows that a single system can be expressed with different visual qualities by varying the dimension and angles of its component units.



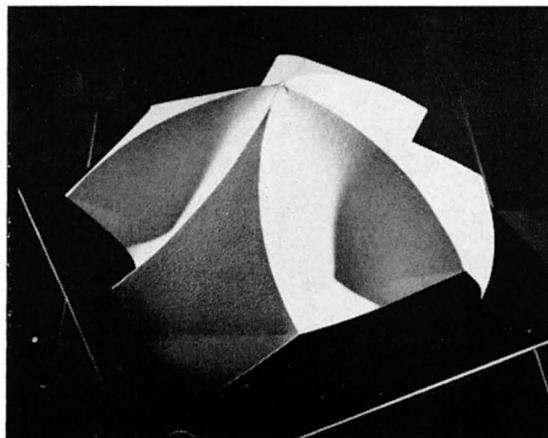
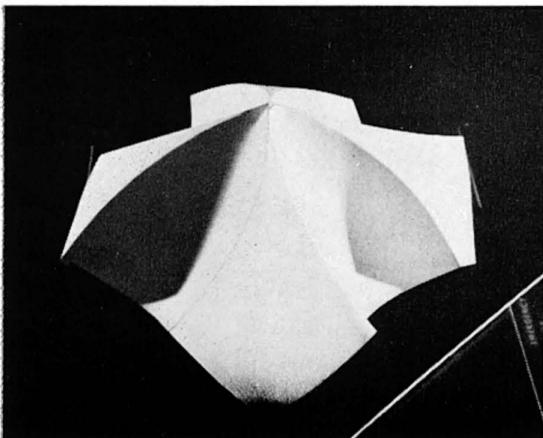
Plan, view, and diagonal section of a structure based upon the combination of a central symmetric unit surrounded by four equal trapezoidal units. Each one of the five units rests on two supports.



Upper: Plan, view, and elevation of a structure obtained by combining twelve units resting on six supports. Lower: Plan, view, and elevation of a structure obtained by combining seven units. The six peripheric units are originated by dividing the central one with a vertical plane that contains its two supports.



These paper models of compound curve structures were made by the design group at Daniel, Mann, Johnson & Mendenhall in an investigation of the clear span and load-bearing capabilities of the hyperbolic paraboloids. It was found that the paper — about 7/100ths on an inch thick — could support 8 to 10 ounces, indicating the strength inherent in the warped surface structure.





The present Chicago Medical Center District is located approximately two miles west of Chicago's Loop. This area, the largest medical complex of its kind, now includes 305 acres and involves over 18,000 people in its varied operations. In this area are six large medical institutions operated by almost every level of government in addition to private and religious groups.

There are no facilities for recreation, few neighborhood parks and no commercial district. One building is plotted at a time. Vehicular circulation loads are great and since on-street parking is permitted traffic is always

chaotic, and total planning of the area is essential. In addition, provisions must be made for new development and growth. In 1941 when the Medical Center District was given official status by the state, a land coverage of 25 percent was considered suitable but in the last two decades institutional building expansion has created densities up to 70 percent in numerous areas. As medical facilities have increased the land coverage has increased, creating higher and higher densities.

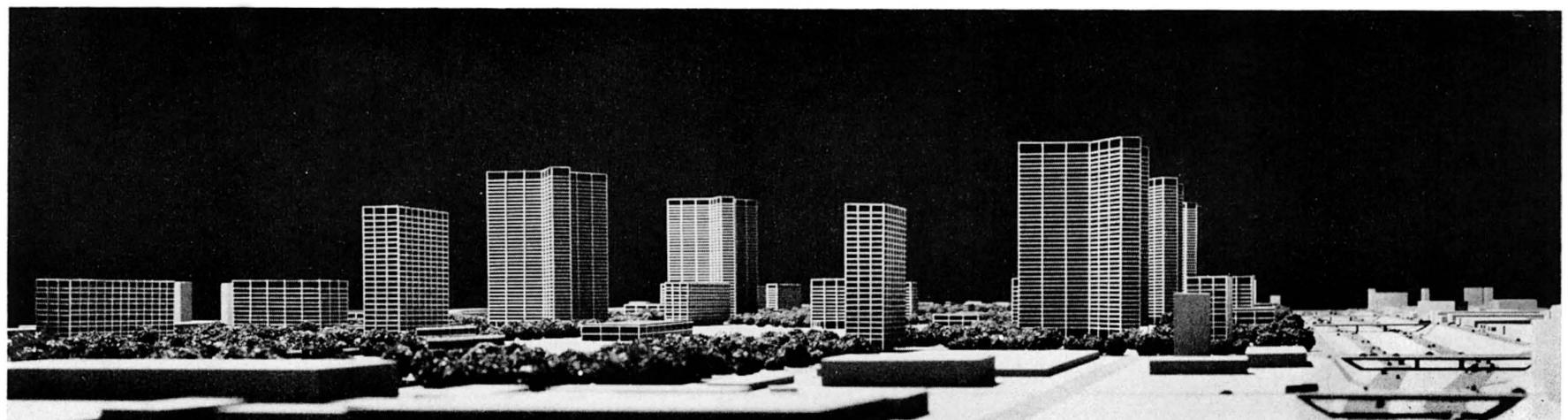
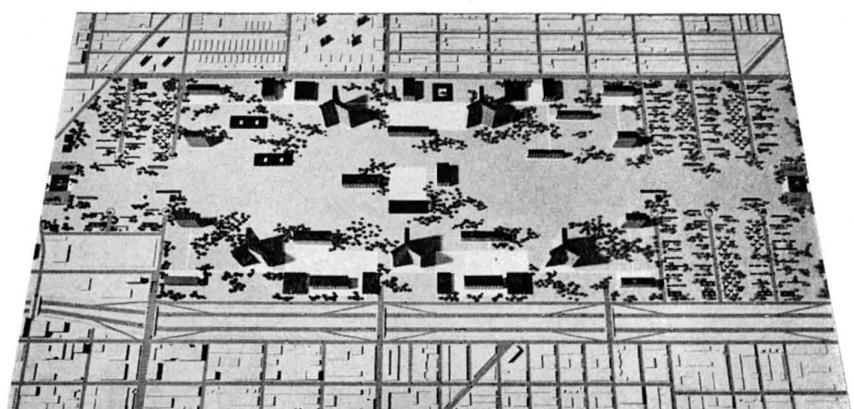
For this project, future space and building requirements were obtained from all of the institutions now located in or planning to move into the

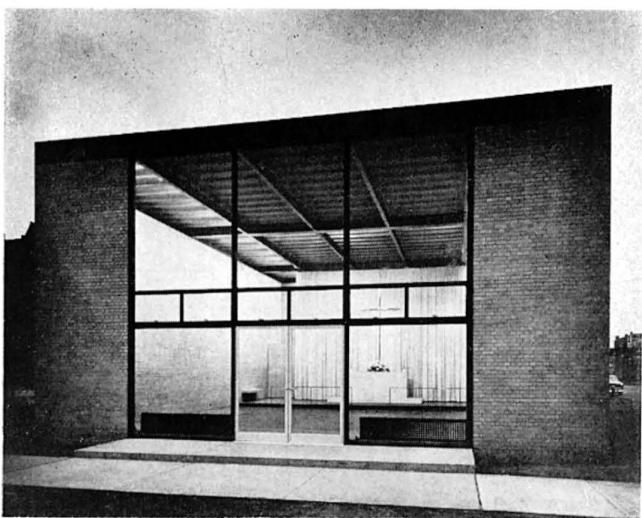
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## CHICAGO MEDICAL CENTER REDEVELOPMENT

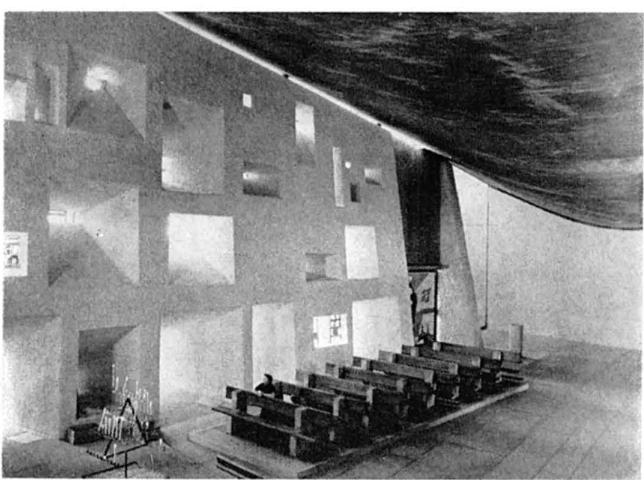
BY WILLIAM R. BAKER

*This redevelopment project was submitted by Mr. Baker in satisfaction of Masters Degree requirements at Illinois Institute of Technology Department of Architecture.*





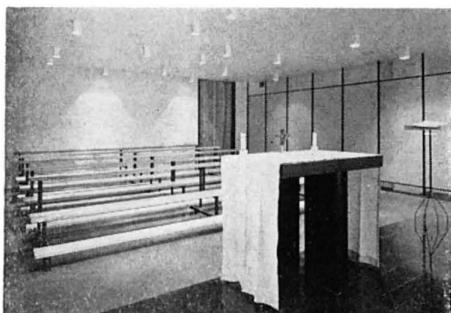
MIES VAN DER ROHE, I.T.T. CHAPEL. PHOTO: HEDRICH-BLESSING.



LE CORBUSIER, RONCHAMP. PHOTO: HANSBEAT STRICKER.



HERMANN BAUR, CHAPEL AT HEM, FRANCE. PHOTO: ART D'EGLISE.



MARC DESSAUVAGE, ST. ANDREW'S MONASTERY, BELGIUM. PHOTO: ART D'EGLISE.



PAUL FELIX, CONVENT AT OSTEND, BELGIUM. PHOTO: ART D'EGLISE.

## CONTEMPORARY CHURCH ARCHITECTURE

The purpose of this conference is to introduce us to the true significance of modern religious architecture. Not so much to recall its history, or to describe the present achievements of church architecture, but to try to grasp and to follow the essentials of the movement and to discover the conditions and the spirit of the church architecture of tomorrow.

We are all convinced that the movement *has* a future. We shall try to see what it will be, or at least what it could be.

In this very constructive context, some of my judgments about the recent past, or about the present of church architecture will perhaps seem a little too negative, or too severe. But, in matters of art, we must aim at only the highest achievements, and we are not allowed to compromise with mediocrity. Half-good things here are much more dangerous than clearly bad ones. And it is a fact that the overwhelming majority of the recent churches are simply second-rate, purely formal adaptations, not creations, and that these mediocrities are more and more pushing the movement of church architecture towards a state of crisis. This crisis, to be expected after the very rapid evolution of the last thirty years, has to be carefully investigated. It may give us the key to a closer and better interpretation of future trends.

Modern religious architecture was born around 1930 out of the union of two very distinct phenomena: on one hand modern architecture, modern interior decoration and modern furniture design, with all their technical means and esthetic values; on the other hand, the liturgical movement with its theological, pastoral, and cultural implications.

These two constituents are essential to any definition or description of modern religious architecture. It is thus necessary to give a brief account of the parallel evolution of modern architecture and of the liturgical movement from 1930 to our day, with some examples of the church architecture which is the result of their encounter. It is the only way to understand the evolution of church architecture itself.

Before 1925-1930, "modern" architecture can only be considered as being in a preparatory stage. During that period, architects gradually acquired a perfect mastery of the new materials and techniques (the technique of concrete and of steel most importantly) and slowly (*very* slowly) eliminated the last remains of the neo-classic, neo-gothic, neo-byzantine revivals—these being—along with others—only so many "historisms", with their corresponding exterior and interior decorations, all of which "had to go". For my part, thus, and against the opinion of many critics, I would not call really modern any church of this pre-1930 period, not even Notre-Dame du Raincy near Paris, by Perret (1924), or the Sankt Antoniuskirche at Basel by architect Moser (1927). In more than one aspect, architectural and liturgical, these churches will date from the 19th century. A genuine modern architecture could not appear before a thorough cleansing was performed and before attention was once more concentrated on the basic, human values of architecture. The material, structure and function acquired more and more a new, direct, honest expression, in and *for* themselves. But this positive gain of the preparatory period, had still to be integrated into a complete esthetic vision.

As far as we can judge from our viewpoint of 1963, this process of integration was achieved in two different but complementary directions: first in an analytic direction; then in a synthetic one.

a. Before 1940-1945, the esthetic vision worked mostly in the direction of a very abstract technological vision of man, and of architecture itself. The embodiments of this architecture, for instance Rockefeller Center in New York, or later Lever House, or the new United Nations building, show a highly rational use of materials (steel, concrete, glass)—a great simplicity of lines and volumes—an almost total exclusion of the curve (considered as irrational) and a strong accent on pure, universal proportions. We generally call this architectural tendency *analytic*, but

By Dom Frederic Debuyst

we could also give it the name of the architect who led it to its highest perfection: Mies van der Rohe. Rational analysis of the architectural elements became, in fact, for Mies van der Rohe and his school (Philip Johnson and others), an extraordinary instrument of esthetic creation and of beauty. *But* we must recognize that many buildings of this genre proved unable to provide a number of practical human necessities (such as proper shelter against heat or against noise) and of course the genre itself does not express the full range of the human values. Nevertheless, I think that the classical simplicity of the Mies van der Rohe tendency is and will remain one of the two poles of modern architecture—and thus also of church design.

b. The second (the other) direction taken by modern architecture, especially *after* 1945, is that of an effort towards the expression of a more organic and more cosmic vision of man and of his universe. The corresponding achievements, here, would be for example the Guggenheim Museum in New York by Frank Lloyd Wright, the chapel of Ronchamp by Le Corbusier and the official buildings of Brasilia by Oscar Niemeyer. All these buildings show a very free and creative use of construction material; a highly complex and organic arrangement of mass and volume, a subtle dialogue between their internal and external space, a powerful, often very bold use of the curve—and (at least with Le Corbusier and his school) a system of proportion based on the bodily structure of man.

A perfect representative of this synthetic (i.e. organic) tendency does not exist yet. Frank Lloyd Wright was too personal, too frequently changing; the other architects of this tendency are tempted to be too “baroque”. For my part, I would choose as head of this movement Le Corbusier. His little chapel at Ronchamp, the most extraordinary building of the whole period of so-called “modern architecture”, can be considered as a perfect counterpart of Mies van der Rohe’s chapel at the Illinois Technological Institute of Chicago. We have here the two poles of new architectural conception at their highest degree of differentiation.

c. A third tendency, *really* distinct from the two others does not exist. Of course, many architects—such as Marcel Breuer, Alexander von Branca, Louis Kahn, Pier Luigi Nervi and others—have succeeded in creating architectural manners that are original combinations of analytic and synthetic elements. But these achievements do not represent a real *tertium quid*. They are only special variations of what remains an essentially synthetic architecture—though they seem to be aiming at an expression of “synthesis” in the deeper and more positive sense of the word.

Critics generally agree that the so-called “synthetic” tendency offers more and better possibilities for church architecture. In theory, this is certainly true. But in fact, we must admit that the best modern churches are still of the more analytic type.

In my opinion, the main reason for this situation is that the liturgical movement itself—which is the most important constitutive factor to modern church architecture has never attained its own synthetic, organic, totalizing stage—though it seems to be making a leap towards this now.

d. We must realize, here, that the liturgical movement is not older than modern architecture itself, and that it did not become a really universal Catholic movement before 1962, i.e., before the first session of the present ecumenical council. It is a fact that the care for an adaptation of the liturgy to the new forms of society and of culture of our day did not come alive before 1910-1920, and then in Belgium and in Germany only—especially in Germany. The first period of the liturgical movement can thus be called the “German period”—and it proved itself typically *analytic* (just like the first period of modern architecture). The German specialists gave us an analysis of the liturgical documents, an analysis of the theological and pastoral principles of celebration, an analysis of active forms of worship, an analysis of the sociological background of worship, etc. All this highly valuable *preparatory* work continued until

1938 and was then interrupted by the Nazi persecution and by the war.

Immediately after the Second World War, the movement renewed its powerful activity in France, in Belgium, in Germany and elsewhere, but on the whole, it kept its analytical character. Typical of this analytic point of view is the new liturgy of the Easter Week (1948), in which the liturgical sections or elements are *juxtaposed* rather than really *organized* and *integrated*, and in which the active participation of the faithful remains clearly in a preparatory, provisional stage (concentrated on the renewal of baptismal vows).

The reason why the liturgical movement did not arrive sooner at its “synthetic” stage is the fact that, almost anywhere in the Catholic church, the community of worshippers—the local ecclesia—is still lacking a liturgical maturity. After many centuries of an exaggerated individualism in our worship, it is clear that maturity—by which we mean an active, intelligent participation in the liturgy—cannot be attained without a slow, organic process of training and of new habituation.

All these liturgical matters, of course, are of great importance to church architecture. The church is first of all the setting of the liturgical celebration. As early as 1930, the German pioneers of the liturgical movement, and in particular Romano Guardini and the architect Rudolf Schwarz prepared the way for our advances today with an analysis of the liturgical space which remains one of the keenest ever performed.

Examples of church architecture resulting from their analysis lead us to believe that in each phase of the evolution the only *good* churches were those which disclosed a clear, simple, uncompromising expression of both the liturgical and the architectural movements of their time. No wonder that good churches in this genre were relatively few: good modern architecture is never common, and genuine liturgical planning is always very difficult. A deeper reason for this scarcity is to be found in the fact that the current idea of the Christian church (“how a church *should* look”) remains generally inaccurate and little adapted to modern concepts of city planning and its sociological, cultural and esthetic intentions.

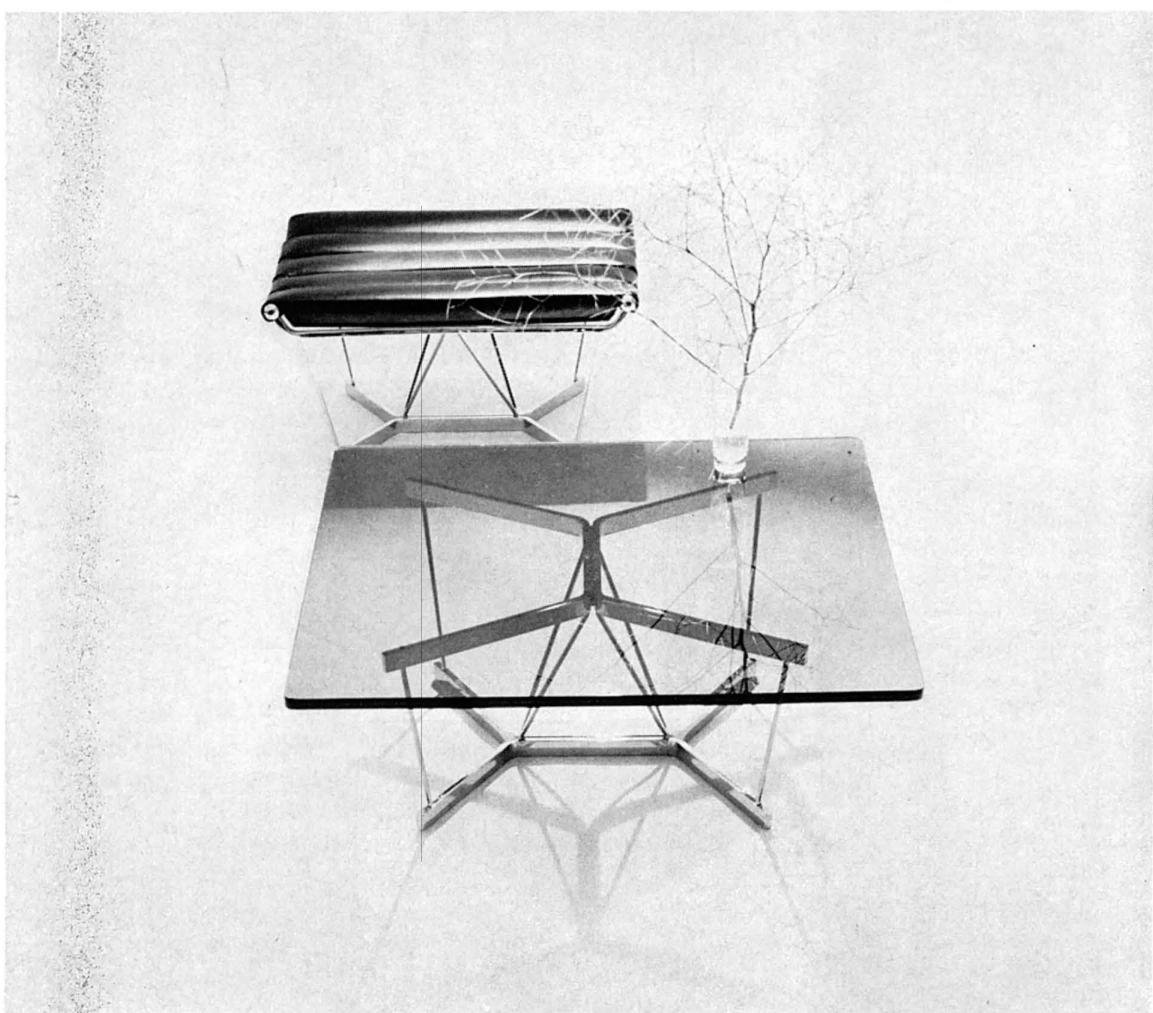
It is clear that the present crisis in church architecture is largely due to the fact that the defects and weaknesses of the historical period 1930-1945 are now appearing on a much larger scale. Church construction is in full swing everywhere and we have to count the new churches not by hundreds, but by thousands. We begin to realize that our previous “little defects” are becoming real sins. We are beginning to realize also that these sins all can be reduced to one common denominator: the tendency to put the accent on the *exterior* of everything, the spirit of *exteriority*.

Only a few aspects of this all-embracing error can be described here. The most obvious are the following:

a. The exterior of the church. We generally believe that a church has to be an external “sign” or symbol of Christianity in the modern city, and therefore that the main concern of the architect must be to give power and “beauty” to the church building’s exterior (symbolic form of the whole, the facade, the tower, etc.). But this is a medieval idea, valid only in reference to an integrally Christian context (the society, the city, the immediate surroundings). In the modern world, this idea can no longer be fulfilled in the church itself without anachronism, because everything except the church is no longer medieval. The externalized symbol is thus reduced to a dead symbol, and the idea which inspired it appears artificial, unreal.

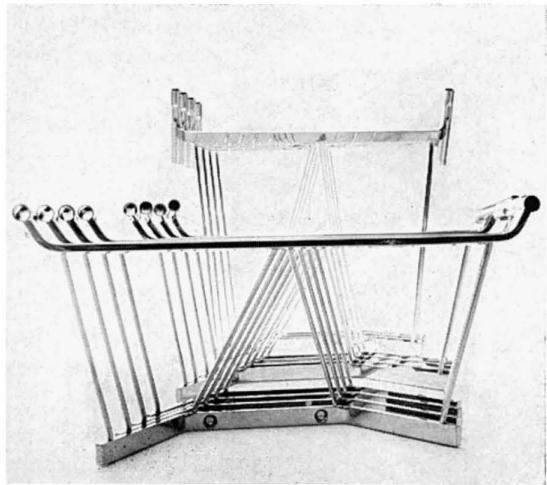
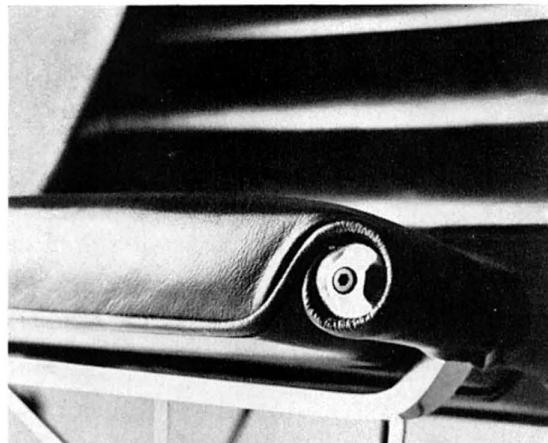
People, of course, continue to insist and to say that a church has to “look different” from any “secular” building. An English critic, Lance Wright answered this viewpoint (see *The Month*, March 1963) saying simply that the attempt by architects to make churches look different has been responsible for the worst features of post-war church building, be-

(Continued on page 32)



## NEW FURNITURE FROM HERMAN MILLER

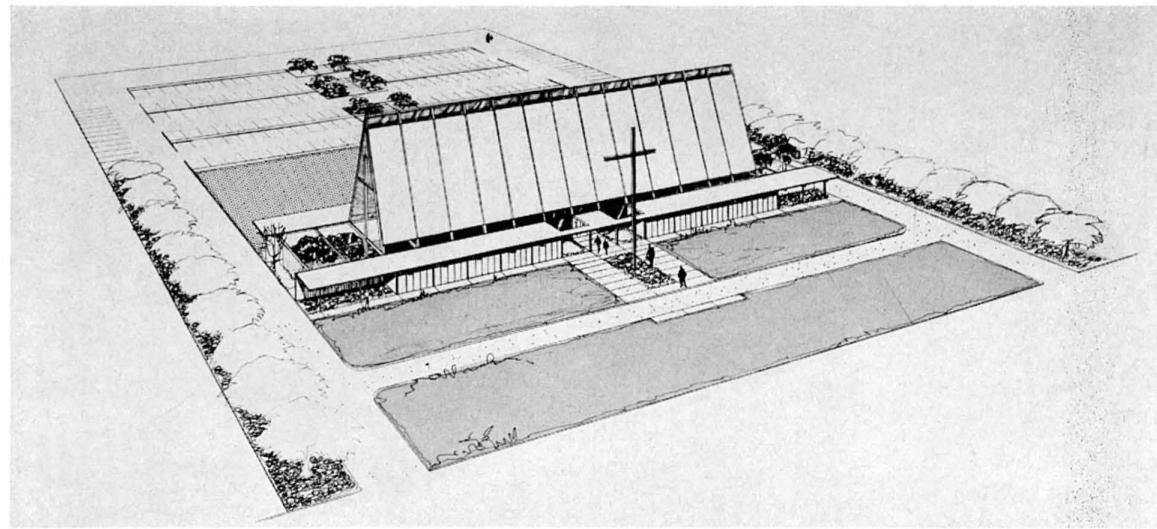
The design of this new Catenary Furniture Group is the result of a conviction upon the part of its designer Ron Beckman of the George Nelson design group that mass production needn't mean monotony. The chair, ottoman and table are all constructed from the same basic parts: base and cross bars preshaped and drilled to receive rods already bent to desired angles which are then fastened in place by epoxy adhesive. Upholstering consists of replaceable sections of foam rubber covered in Best Aucht leather, nylon or wool fabric, suspended on steel cables. Assembly time is a matter of minutes.



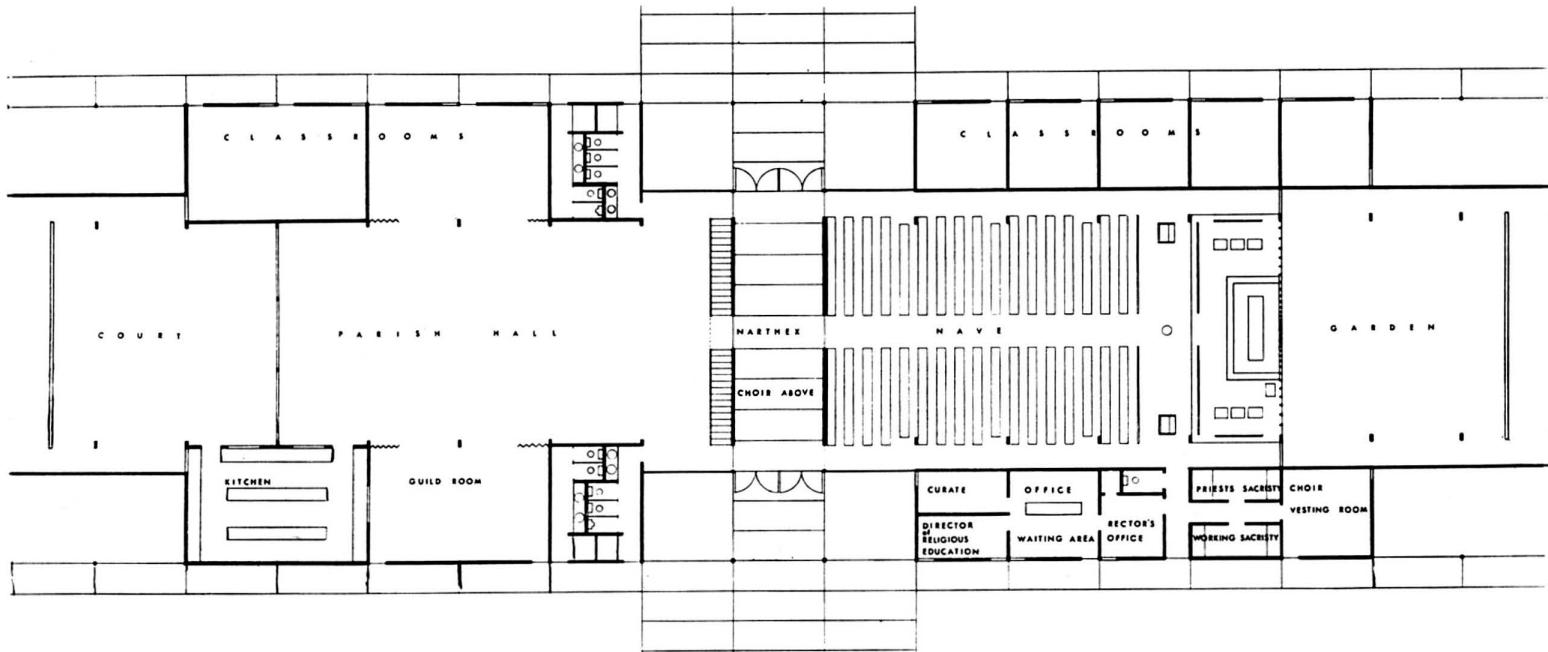
Fundamental consideration in the design for St. Mark's Episcopal Church in Upland, Calif., was that since all activities—worship, stewardship, education—are interrelated that this unity of purpose in diversity of activity should be expressed architecturally. In addition, the architect feels that the building, though expandable, should appear complete from the street and future expansion should not affect the appearance of the design.

The proposed plan utilizes the full width of the property and consists of four low expandable areas: one containing offices, sacristy, choir vesting room; the second, kitchen, guild room and toilet facilities; and two units reached by covered walks containing school facilities and office.

The high roof encloses the space between

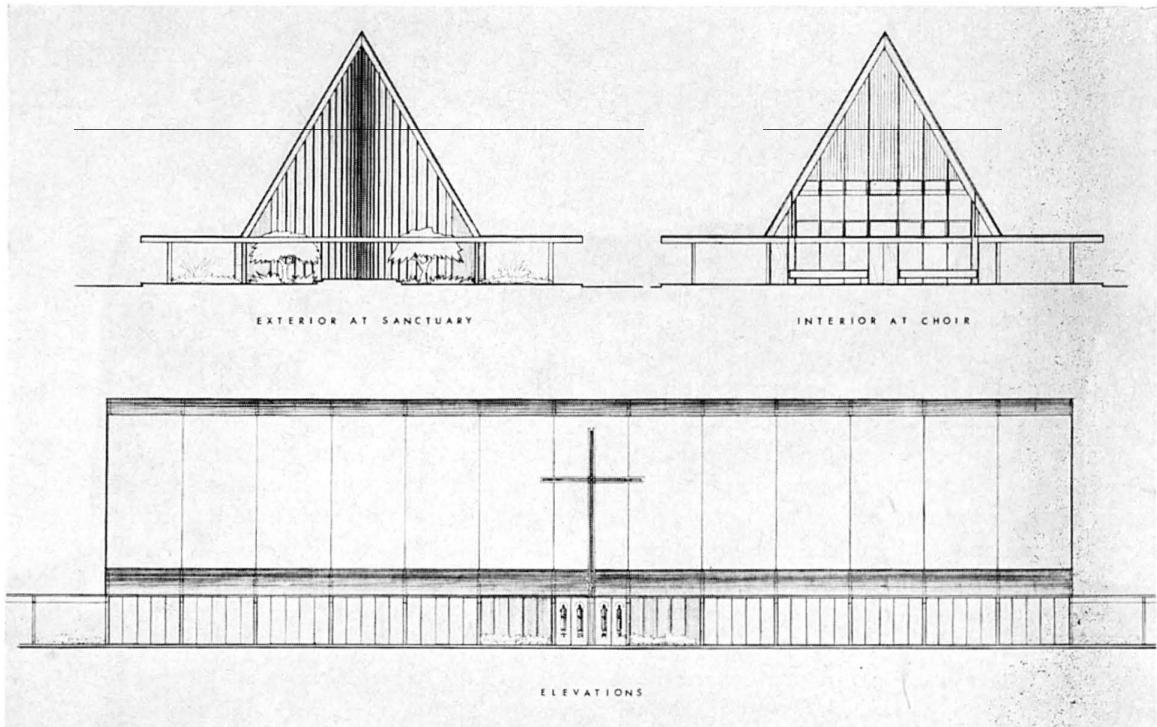


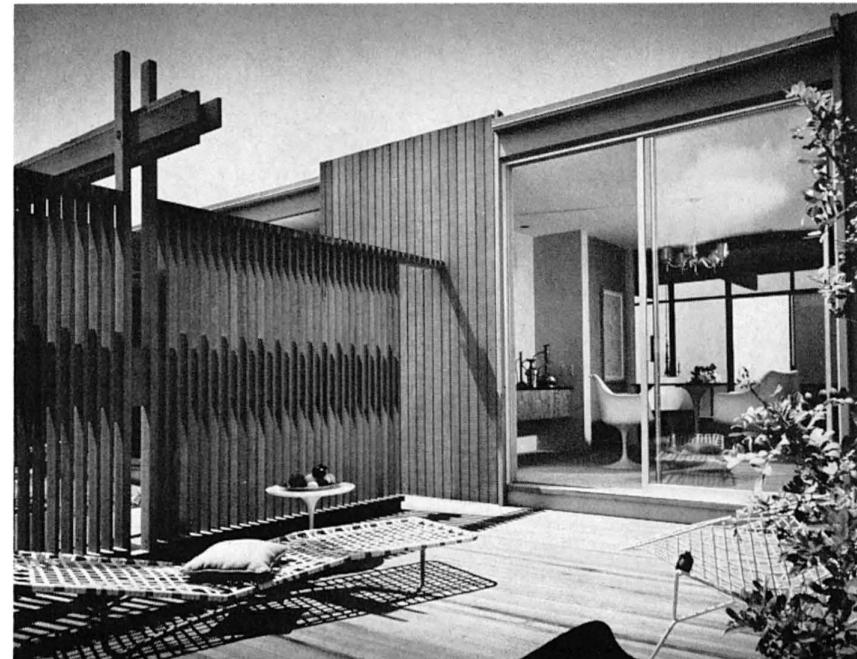
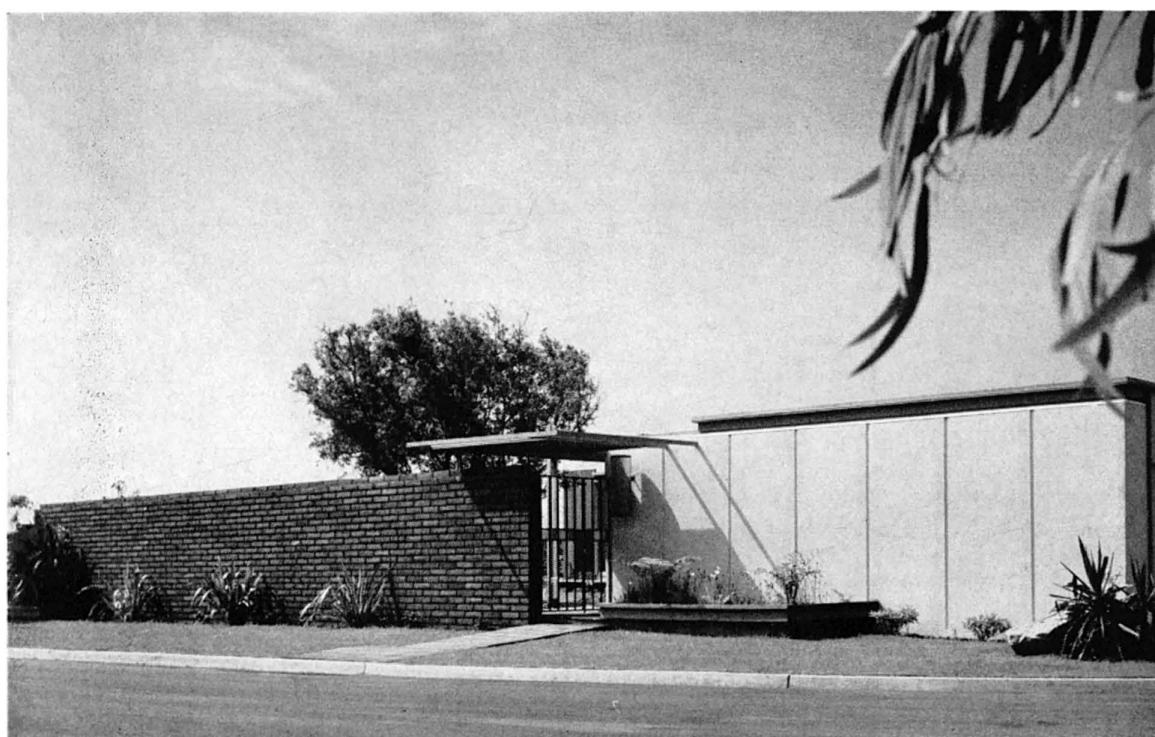
CHURCH BY CARLETON M. WINSLOW, ARCHITECT



the low elements and covers both church and parish hall which are separated by the narthex and choir loft above. The church, with seating capacity of 350, consists of nave and sanctuary with free-standing altar, behind which is a partially open wall allowing a view of the garden from the church interior. The high roof is open at ridge and bottom providing light and a floating effect.

The structure will be wood frame over a concrete slab with walls between low areas and the center space to be brick masonry. The high roof will be some form of tile, though the architect would prefer copper. Heating is to be hot water radiant in copper tubes; cabinet work will be birch. Pews and sanctuary furniture will be a combination of oak, travertine (for the altar mensa) and gold mosaic. The 14' module is derived from a pew spacing of 2'10" and results in 14' classrooms, offices and sacristies and a 28' kitchen, guild room, nursery, etc. All partitions are nonbearing allowing spaces to be dictated by need. Total area is about 10,880 square feet (plus covered walks) at an estimated cost of \$10 a foot.





## HOUSE IN LAGUNA BEACH, CALIFORNIA, BY RICHARD H. DODD, ARCHITECT

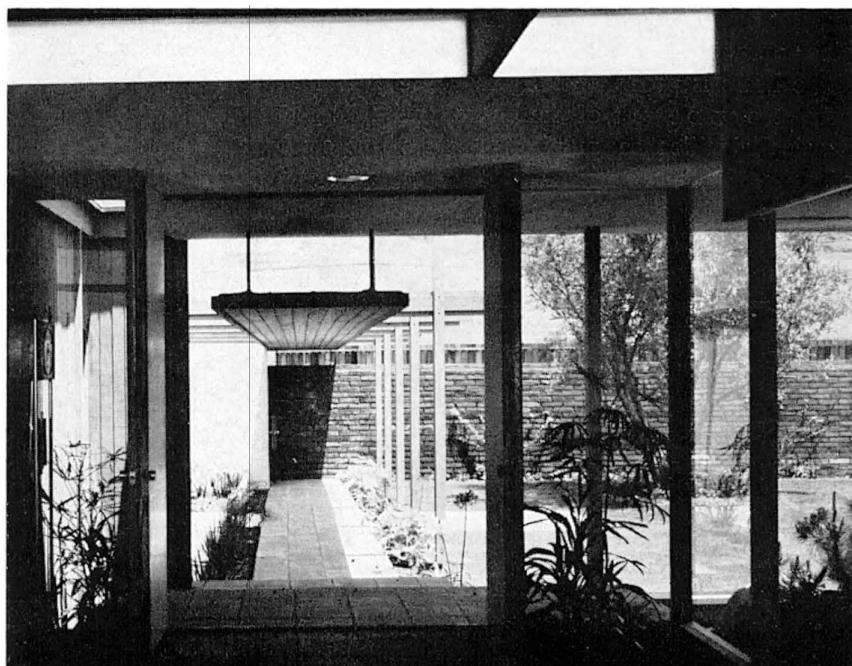
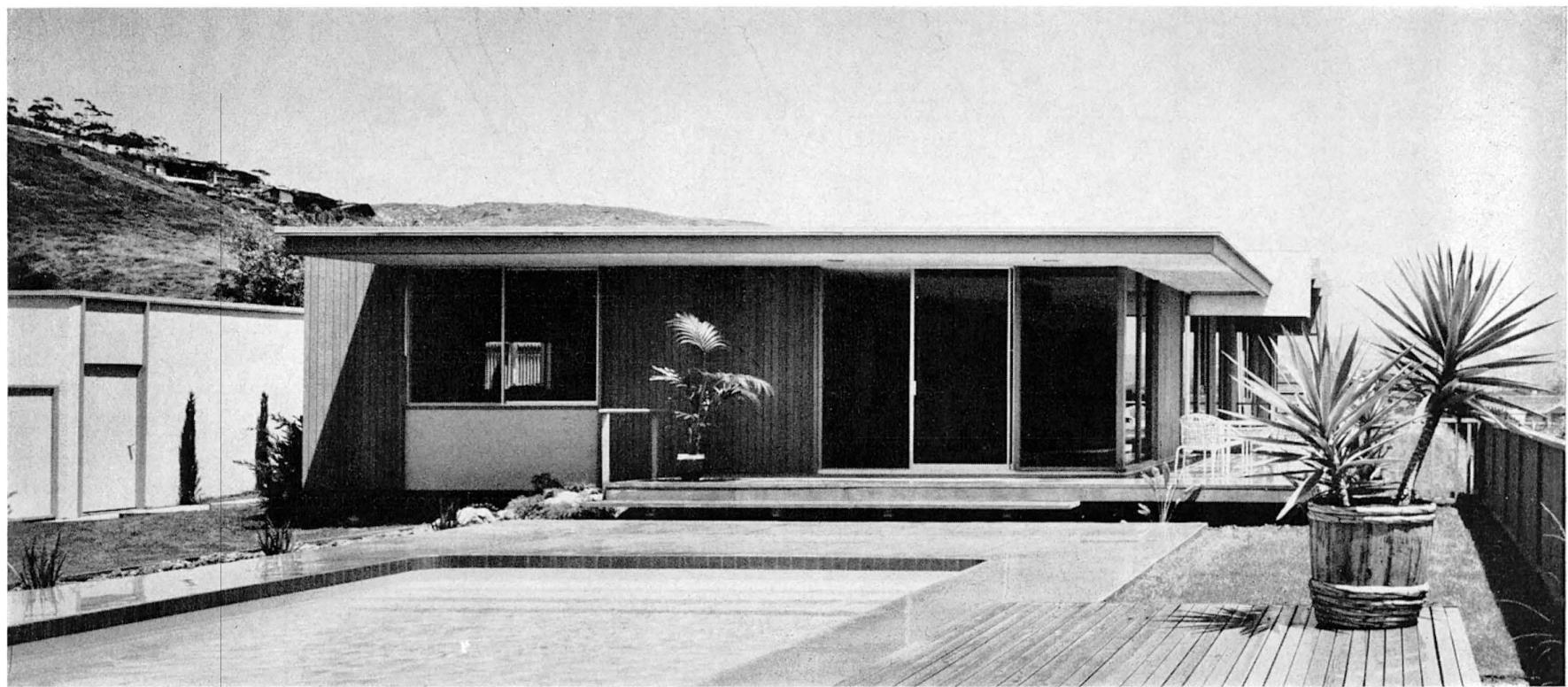
*Custom furniture by R. B. Saltz, Crossroads Mfg. Inc.*

This speculative home at Irvine Cove, Laguna Beach, Calif., is sited on a very large lot in an exclusive subdivision. The long frontage on the street made it advisable to give special consideration to street elevation. Consideration was also given to providing a sound barrier between the house and a near-by highway. In order to be competitively priced, the house had to be kept simple. Other factors taken into consideration were: flexibility in plan to facilitate additions, an ocean view on one side, a view of rolling hills on two other sides, and an architectural committee which governed design

as well as height.

A simple rectangular plan evolved using a four-foot module. Girders were placed four feet on center and cantilevered over the foundation. The foundation was rectangular and the entry and entry garden were recessed into the rectangular foundation forming a sunken garden and bench. A flat roof was used and raised to the maximum height allowed in order to achieve the highest floor level possible. A few inches were critical as far as the view of the rocks and coves below were concerned.

The rough textured stucco panels of the side wall of the garage and a large redwood planter serve as a design feature for the entry. Offset from the garage wall is an eight-foot Mexican brick wall used not only for color and texture but to provide privacy and insulation from the highway noise. A steel gate with colored glass and redwood inserts, opens onto a covered entry walk of handmade Mexican pavers which form a bridge over a large reflection pool. The entry walk passes the dining deck which is partially hidden by a decorative redwood screen and ends at two large hand

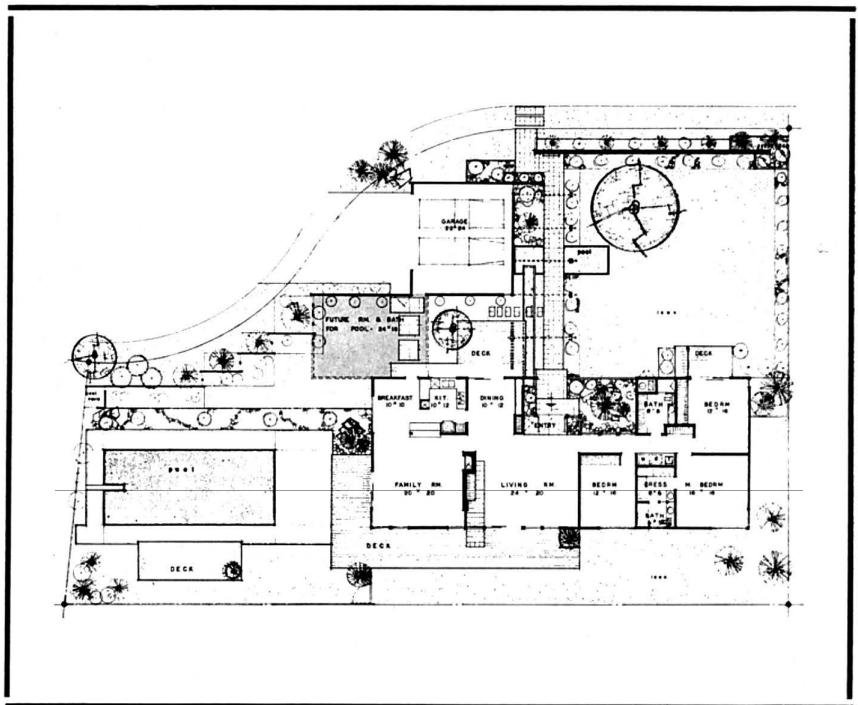


PHOTOGRAPHS BY JULIUS SHULMAN

carved entry doors with sunken gardens on each side. As one enters he sees a view of the ocean through large windows on the opposite wall.

In the interior, decorated by Gene Andrew of Crossroads Design Associates, large simple planes of stucco and wood are contrasted with colorful rough textured brick. All cabinets are natural teak. Grey plate glass is used entirely on the ocean view sides.

To achieve flexibility, space for expansion is provided. An extra room and bath for use from the pool can be added between the kitchen and garage.





his priests, the classrooms of the catechumens, etc. The church itself was generally located behind the other Christian buildings, in a place well sheltered from the constant uproar of the streets, and was usually simply a large hall, with many interior sections, but without any tower or decorated facade.

This concealment of the church within a complex of other ecclesiastical buildings remained the rule until the whole town (geographically speaking) and the society as a whole began to be and to look Christian, i.e., until the society and town began to serve as adjunct to and at the same time as a protection for the church.

This period corresponds historically to the birth of the medieval town. In this transition from the ancient to a medieval order of things, we can follow the transformation of the simple "house-church" into the "ecclesiastical complex" church and finally into the parish and town church (or cathedral). The period of the great cathedrals, notwithstanding its artistic and even its spiritual magnificence, was also the time in which the old accent on interiority and on the spirit of liturgical simplicity began to degenerate, and to give way to a markedly external, symbolic, monumental concept.

It is this "striving for appearance" that we still find in many of our pseudo-modern churches. Therefore the first thing the church architect of today has to aim at is rethinking everything concerning such matters as the proper location, the exact function, the *real* religious significance of his church-building in the *modern, not medieval town*.

We are sure that most of the time (certain exceptions aside: for example a big monastic community, or a totally Catholic little town in the mountains, etc.) the only true solution will be found in turning one's back on all this grandiose striving and in returning, in a vital contemporary manner, to the principles (if not to the exact practices) of the old ecclesiastical-complex church, or even to the primitive house-church.

Therefore, the churches of the future, if they are to be really good churches, will have to look much more like simple houses than like the churches of today or yesterday. We shall conclude by trying to explain the reason for this paradox.

Three main points must be made:

1. When we say that the churches of tomorrow will look like simple houses, we mean that they shall have to find again (and to express) the basic value of any really human house: the quality of hospitality. But hospitality is a very rich concept—one which implies much more than the idea of putting people at ease and offering them coziness. Nothing really human is indifferent to genuine hospitality. In its architectural application, true hospitality is an answer to all the necessities of the human soul and body, of human heart and sensibility—and first of all to our specifically spiritual need for transparency, for harmony and for proportion in our place of worship.

Therefore the problem will be to find the type of real house which offers today the deepest and most human kind of hospitality and to think how best to adapt it to the purposes of church architecture. One thing is certain: the influence of modern *public* architecture (the town-hall, theater, school, social center, etc.) which has been preponderant in church architecture during these last forty years, will have to give way to more intimate values. I think for my part that (at least for small churches) the most interesting "profane" building from this point of view (especially in America, particularly in California) is the modern country house, the "one room house" with its internal partitions. It displays by and large a functional character of adaptability, a normal use of honest, organic building materials, and a genuine spirit of simplicity, of quiet harmony, of human transparency and openness—

qualities all of which are capable of inspiring human souls and bodies to those higher values of prayer and celebration which constitute church worship.

2. The modern church, therefore, should be a real human house. But it cannot be just an ordinary house. The church is the house of the local ecclesia, the house of the Christian community. Its special function, and its highest dignity is to be the place of liturgical celebration. And true celebration is never purely functional, or better: celebration is a function which always carries its participants beyond its own material forms and gestures. It calls the faithful together and takes them out of the routine of everyday life in order to introduce them in a world whose rules and values—without being totally abstracted from the world of material realities—are altogether new and different. Christian celebration, like any kind of celebration, is intrinsically symbolic. It is the living, festive, but perfectly genuine expression of the new relationship between God and His people established in Christ by the sacrifice of Christ.

Our churches are called "houses of God" and they receive a special consecration; but all that is fundamentally because they are the scene, the place of liturgical celebration. We may realize this very clearly by considering the fact that during the early Christian centuries, the only form of consecration of any church was the Eucharist itself. The very first Sacrificial Celebration which was accomplished in a particular room or a building *per ipse* set this building apart as a sacred place. And that place was henceforth sacred, not because of its special shape or because of its "mystical lighting" but because of the deep, symbolical sig-

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nificance of its celebratory function.

Therefore we should expect our modern churches not to *double* their symbolism but, in their interior and exterior to remain in intimate contact with the celebration. The "house of God"—which, to remind you once again, means a home—home of the celebration, home of community, home of the Eucharistic Presence, is in itself a totalizing symbol. Then, the architecture, rightly conceived, should no more tend to constitute a separate symbolic system (as it is the case, for example, with the cathedral of Brasilia, whose exterior shape represents a crown of thorns).

In fact, what architects and designers have to do is simply to follow and to reflect in their architectural language the intrinsic nature of the celebration, i.e., its spirit of calm festivity, of living and loving interiority. This in itself will lead us to the very characteristic quality which we have called "interior classicism", the distinguishing mark of any true contemporary liturgical-minded church architecture.

This concept of interior classicism is also the key to the solution of many other problems of church design—in particular the problem of the church's interior decoration—which we shall be obliged, for lack of time, to discuss in another conference.

3. A third and final point is to take into account (a kind of synthesis of the two others) that celebration is not only an objective world, to be contemplated from outside by simple bystanders. It is first of all, a personal, dynamic totality designed to be participated in from the inside, by a living community.

Therefore, in our Christian celebrations, the main accent has to be put in the personal communication between the celebrant, who takes the place of Christ, and the community of the faithful. The important thing, here, is the Living Word, the Living Sacri-

fice—Christ—not the liturgical objects and that means not even the altar.

This realization is of great importance to church architecture. In the human, festive, liturgical church interior, the person of the priest, the person of the faithful must be helped to exercise their respective functions with a real creative freedom. Therefore the liturgical arrangement, and all of the liturgical objects, must show a sufficient openness, a sufficient spatial liberty, to be in harmony with the personal, human accent of the celebration. Examples of this guiding idea of personalism and creative freedom within the celebration remain imperfect in their concrete realization. But they show us with a certain simplicity the general direction we have to follow. They show us also that church architecture is slowly progressing towards a great altogether human-and-Christian ideal: the concept of *total* hospitality.

#### CHICAGO MEDICAL CENTER REDEVELOPMENT — WILLIAM BAKER (Continued from page 25)

District. Generous allowances were made for the expansion of all facilities and the Medical Center conceived as an important element in a plan involving the total urban community rather than in isolation. The Center is accessible within minutes from any community or urban area in the county via the Congress Expressway.

In the final solution, all institutional buildings are placed in the center of the Medical District between Damen and Racine Avenues. Of the major institutions in the Medical Center District, Cook County Hospital and the University of Illinois are placed along the north side of the site. The Veteran's Administration, Presbyterian-St. Lukes and the State of Illinois Department of Mental Health are located along the south side of the site. Since the Chicago Medical School uses the facilities of the other institutions, it is placed in the center of the medical area. Except for the facilities of the Chicago Medical School, all research laboratories, medical-dental schools and office-maintenance buildings are placed at the perimeter of the site. The large center area, between the east-west travertine walks, contains only hospitals and high rise residential structures, buildings concerned with orientation, view and environment.

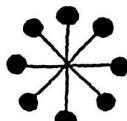
The most important buildings in the Medical Center District are the five tall hospital structures. These buildings are free standing, placed so they do not interfere with each other and assure an unobstructed view from each patient's room. Because of their physical dimensions and nature, the buildings become architecturally the most important elements and accentuate the feeling of spaciousness and expanse. In addition the "Y" shaped hospital buildings, because of their placement, create an optical order in the Medical Center, emphasizing the unity of the Medical Center.

To develop a pleasant environment for the medical area, the Medical Area as a whole is set in a park.

Commercial facilities are located on the extreme west and east sides of the site. These shopping structures are easily accessible to pedestrians as well as those who come by automobile. The residential areas are located east and west of the institutional area and contain a great variety of housing accommodations.

Residential thoroughfares become cul-de-sac lanes, carrying traffic concerned only with residents of that particular street. As a consequence, vehicular noise, odor and danger are reduced to a minimum. Three of the city's major streets become access streets, below grade, to the institutional area. Damen Avenue, Ashland Avenue and Racine Avenue are ingress points carrying ambulances, delivery trucks and private automobiles to delivery platforms and parking spaces at the lower level.

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HOW LONG IS ART—JOHN E. BURCHARD  
(Continued from page 19)

It is, of course, the general problem of our time that each craft takes long to learn and that no person can master many. In the other aspects of education, however, we make some effort at hinting to the non-professional what the craft might be like. We set the student in the scientific laboratory willy-nilly. We do not set him in the studio unless he volunteers, and then we do not encourage him to "waste" much time there. He takes a pass at making science and he takes a pass at learning to talk about art. How right the scientists have been to refuse to regard talking about science as an adequate training in science, though it is not so clear that many non-scientists have learned science even in a laboratory.

And yet how valuable it would be if we could somehow manage—I do not know how—that all our students should come to grips with the process of making art, even in our time, when the admiration, even the acceptance, of craftsmanship seems to be at a low ebb. It is perhaps only by trying to see what is in a blade of grass that he can fully realize not only his own inadequacies but the power of another. And this need not be discouraging but, instead, stimulating.

There should perhaps be a word of warning here. It is the fashion to add studio courses of a new kind in art curricula to involve the student in making as well as looking and talking. It seems like a good idea. But it has not really been tested. All we know is that some students not aiming to be artists have made, as children have before them, some interesting things. Perhaps we have turned the path for a few into the direction of making art. But we do not know whether the rest are better critics, better patrons, better comprehenders of the arts for the laboratory experience. It is easy to run aground on the shoals of technique. But the experiment is one that should be continued and if I may say so with more imagination and in a greater variety of ways, and steadily reexamined and tested in so far as testing is possible.

In the end, though, most of our university products will be consumer, not makers, of art if we are lucky enough so that they are not merely indifferent. It seems good that the young artist and the young consumer should grow up together and not in different groves, the one of Academe, the other Bohemia. But this is more important for the consumer than for the artist for whom in any event the university with all its Laputan absurdities and protocols can hardly serve as the model of all society. It is important for the consumer to be alert to art for if he is not he will miss much of the richness, even the thoughtfulness, of art.

I would like to suggest this by examples. I wish the examples might be from painting, sculpture, architecture, music, and not alone from literature. But this is impracticable. If I simply cite examples, the nave of Amiens, a painting by Leonardo, even the most obvious ones will not provoke a vivid enough recollection to make the example meaningful. I could do little better with slides or other reproduced material, for these are pale things too, useful principally for analysis. You will never really comprehend the spaces of Amiens or Santa Sofia until you stand in them and until you do some of their transcendent glories will escape you. You cannot really see any painting save in its actual size and place. This is one of the disadvantages in the United States. Not many of us, despite our affluence, will ever visit Amiens or Athens or Persepolis or the Uffizi Gallery or the Prado. We are a new country and have few monuments of architectural history, none to stand with the greatest of all time. Our collections of early paintings, even in our greatest galleries in the East, are meagre when compared with what can be seen in Padua, Arezzo, Florence, Rome, Madrid or the Netherlands. So we have to do the best we can about the past. We can do better for the future, of course, and the universities can help if they demand and get fine architecture, if they become avid and discriminating patrons of the contemporary arts. It will be by the environment as well as the classes that students may come in the end to realize a great truth. This is that truth:

When the arts are working at their best—and this applies to all of them—they are usually not telling us new things or calling our attention to new sights, but are managing rather to focus a light on an old truth or an old scene with such power that we see it anew, even as if for

(Continued on page 36)

For  
Your  
Information

Q: I notice in the many large apartment house developments that some are known as cooperatives and some as condominium. What is the difference?

A: The Building Contractors Association of California held its third annual Condominium Conference recently to discuss the legal, design, marketing and operating requirements for commercial and industrial as well as residential condominium projects. There seems to be an increasing interest in the subject and the Association has compiled quite a file of valuable information on it. The chief difference between this and the cooperatives is that in the condominium apartment each owner possesses the actual fee title to his individual apartment rather than an undivided interest in the whole building and grounds. In addition to his apartment he does own such an undivided interest in those things which are shared by all. Because of this difference, the owner has the ability to sell his interest individually, to mortgage his unit individually, is taxed individually, and benefits individually from improvements he makes to his own portion without accepting the degree of "mutual risk" involved in the cooperative development.

Q: For a non-combustible pitched roof, what are some of the roofing materials now available?

A: For a 4 in 12 minimum pitch, there are the aluminum interlocking shake shingles applied over two-ply 30# felt base, and both the 235# asphalt shingles and the 240# asbestos shingles with Class C Underwriters Label. All types of clay roofing tile can be used with 2 in 12 minimum pitch. These include shingle tile, American method shingle tile and Mission tile and carry the Class B Underwriters Label. Both the cast-in-place and the pre-cast Bermuda roofing tile, made with zonolite aggregate, can be used on roofs where the minimum pitch is 3 in 12.

Q: What are the proposals of the Uniform Standard for engineered lumber?

A: The proposed changes are a forward step toward making lumber an engineered building material. They officially recognize the fact that moisture content dictates the thickness of lumber as related to strength. They will enable strength values for both dry and unseasoned lumber to be directly related to precision-manufactured dry dimension, having efficient and easily understood structural values, and eliminate the wasteful practice of producing dry at the present 1 1/8" thickness when the U.S. Government Forest Products Laboratory and other studies prove that 1 1/2" dried to the 15% M.C. is more than adequate to satisfy existing span tables.

Of even more importance, the Revised Simplified Practice Recommendation 16-53 will help open the way to tremendous simplification of span tables, reducing the tables from the present 112 to 8, and will be a key to the plan to effect simplified grades and nomenclature.

The proposals include the following:

1. The establishment of a definite standard for lumber.
2. Lumber sizes related directly to moisture content.
3. Lumber dried to 15% average, 19% maximum, to be marked "Dry".
4. Moisture content of dry lumber to be 15% average, 19% maximum. (Present standards specify 19% average with no upper limit.)
5. Minimum surfaced thickness of dry framing lumber to be 1 1/2" at 15% M.C. Surfaced board thickness at 3/4" and 5/8".
6. Green lumber to be surfaced at sizes which will allow for shrinkage and be the equivalent of the dry size when 15% M.C. is reached.

## NORTHERN CALIFORNIA NEWS

By Bill Sherman

San Francisco's Fillmore Center is a tired district; one worn out by its high vacancy rate of 20%. It is an area of both physical and economic stagnation.

Such deterioration brought Fillmore to the attention of the San Francisco Redevelopment Agency. To augment the agency's planning division Roy Wenzlick & Company was selected to prepare an economic analysis of potential land use. The subsequent analysis showed that the Fillmore Center is adaptable to a plan of retention and rehabilitation; it is capable of supplying a community shopping center to serve from 110,000 - 150,000 people. The Fillmore Merchants & Improvement Association joined the Redevelopment Agency embarking on a joint venture aimed at restoring the square mile of valley set between San Francisco's historic hills to a position of commercial prominence.

The planning problem faced by the consulting architects Reid, Rockwell, Banwell, & Tarics was to formulate a design to upgrade the district as a shopping center and residential complex.

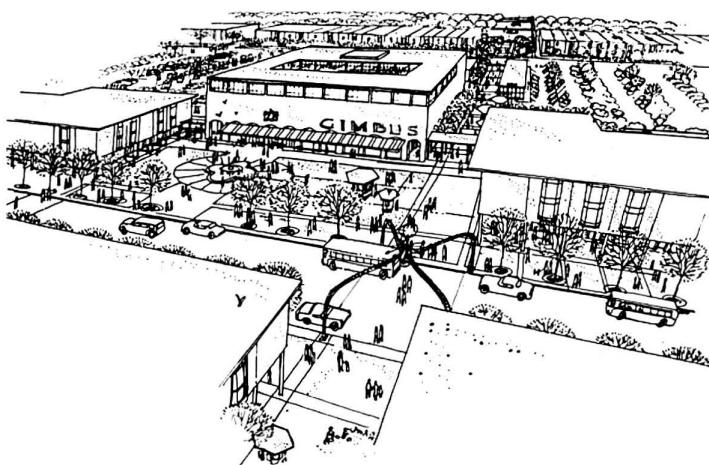
Access into the Fillmore area is excellent. Automobiles may enter from Geary Street on the north, Webster on the east, and Turk Street on the south—all streets are either present or planned expressways, connecting the downtown areas with the Mission and Marina districts. Fillmore Street itself serves as the main artery, and although it permits no parking, it allows two-way traffic to flow through the area, enabling bus passengers to make a direct entry to the district. Ellis Street, the east-west main stem, is planned as a pedestrian mall.

Good access patterns create parking problems. The Center has provided space for 714 cars to be spotted at four diverse locations, each with the same proximity to the focal point of Fillmore and Ellis. While present planning only considers uncovered parking areas, each lot is large enough to permit additional overhead storage should the demand make it economically desirable.

The overall architectural character recommended by the planners is one based upon strong and simple lines. Existing buildings having historical significance will be restored to their original condition; other buildings will require design changes.

A series of key landmarks were suggested by the planners. One is a large fountain; another, a revival of the former lighted arches to span the intersections of Fillmore Street at Eddy, Ellis, and O'Farrell Streets, including a traditional clock embedded in the central arch. Open and planted spaces, a large fountain, and specially designed bus shelters are planned. It was proposed that streets, rather than conform to the usual concept of concrete and asphalt, be paved with brick of varying colors and textures.

Underground utilities have been recommended and it is believed likely that the overhead trolley wires for busses may be unnecessary by the time construction begins. If tram wires are needed, it is suggested that these supports be combined with the street arches wherever possible. The implementation of the program is the concern of San Francisco Redevelopment Agency, which is headed by Executive Director, Justin Herman. Chief of the Agency Planning Division is Norman Murdock, who is now readying the complete plan for discussion and approval by the San Francisco Board of Supervisors. Construction is to begin sometime in Spring of 1964.

HOW LONG IS ART — JOHN E. BURCHARD  
(Continued from page 35)

the first time, and moreover remember it long afterwards. I select the most obvious and the familiar examples because this very familiarity is a sign not of their banality but rather of their durable evocativeness. Sometimes all the artist does is to state the obvious in a quite straightforward way to which you may either nod your head in assent or leap to larger meanings. This is what Abraham Cowley did when he wrote:

"The thirsty earth soaks up the rain,  
And drinks, and gapes for drink again.  
The plants suck in the earth, and are  
With constant drinking fresh and fair."

We tend to think too lightly of the results because when art is successful it seems to have been very easy to do, and we wonder why we have not done it ourselves. This is, of course, especially true of the verbal arts since most of us at heart think we know how to speak and write though the artists will teach us quickly enough that we do not. Think, for example, of how much is packed into the fool's remark as King Lear begins to disrobe. Yet all he seems to say is, "Tis a naughty night to swim in."

That something universal is afoot is more obvious when Christopher Marlowe tells us in *Faustus*,

"Cut is the branch that might have grown full straight,  
And burned is Apollo's laurel bough."

It raises no hackles of plagiarism when we find essentially the same idea in Shakespeare, applied now to Antony,

"O, withered is the garland of the war,  
The soldier's pole is fallen!"

Much of the time, though, the poets seem merely to be giving us sharpened vision of people or places. But how sharp the vision!

There is Keats in the *Eve of St. Agnes*, "The silver, snarling trumpets 'gan to chide," or in *Hyperion* telling of "Those greenrobed senators of mighty woods." There is Shelley's "lovely lady, garmented in light from her own beauty," or his evocation of sound, "Music, when soft voices die." There is Burns' dame in *Tam o'Shanter*, "Nursing her wrath to keep it warm," or his image of pleasures "like poppies spread," or

"Like the snow fall in the river,  
A moment white, then melts forever."

When Tennyson gives us a color, he may say it is "More black than ashbuds in the front of March," or describe a person as "Insipid as the queen upon a card." Wordsworth, too, evokes sound,

"The holy time is quiet as a nun  
Breathless with adoration"

or the play of light,

"The rainbow comes and goes,  
And lovely is the rose."

There is the enormous power of Milton when he says

". . . yet from those flames  
No light, but rather darkness visible . . ."

Any such observations can, of course, be lifted to higher levels by the perceptive listener and it is not always necessary to examine the poet's intentions, for among artists, especially now, it is common, if with tongue in cheek, to deny intentions; Robert Browning was almost unique in admitting failure with his insistence on the fact that we should praise aspiration more than achievement. In the middle ground is the jolt brought to our self-esteem by the quiet comment about himself by Keats, "Here lies one whose name was writ in water," or the mirror offered us by Wordsworth's *Peter Bell*, twenty times more feared than respected, for whom

"A primrose by a river's brim  
A yellow primrose was to him,  
And it was nothing more."

Even when the observations become more explicit, the artistry still matters. So we can yearn for Yeats'

"Land of Heart's Desire,  
Where beauty has no ebb, decay no flood."

Or accept Shakespeare's assertion, so contrary to common sense,

"And when Love speaks, the voice of all the gods  
Makes heaven drowsy with the harmony."

Or the more mystical assertion of Keats,

"Heard melodies are sweet, but those unheard  
Are sweeter."

It is moreover the province of art to tell us, as Tennyson does,  
"It is the little rift within the lute  
That by and by will make the music mute,  
And ever widening slowly silence all."

I have gone to this length to convince you through your reactions and memories that our educational methods have succeeded in some measure at least in giving many of us some sensitivity to the art of literature. We have not succeeded nearly so well in the visual arts and it is to aim at better things, I presume, that we have come here to dedicate this building.

The achievement will not be easy. There is the decline of the crafts; there is the absence of common language and common purpose in the contemporary arts; there is the presence of a lot of idle public talk and fashion; there is the gnawing suspicion that the arts do not have as many functional roles to play as they did in the Caves, in Egypt, in the Middle Ages, in days of magic or mystery, when there was little knowledge, little literature, and no cameras or printing or radio or television at all; there are the real difficulties of how to bring artists usefully to the campus without harnessing them, to their own disadvantage and the disadvantage of art. There is the difficulty of striking the right balance between talk and performance, between looking and doing. All this will require a good deal of imagination, zeal and pertinacity. But the task is not impossible and the present conditions make it more than ever imperative. This building is, I suppose, tangible evidence that some people around the University of Redlands also think that it can be done. This is good news.

## ART

(Continued from page 11)

For the final Canto: It is through reflection that Dante reaches the center of his infernal experience and emerges on his way to Paradiso. The mirror image, implicit in R.'s transfer technique has been carried throughout the illustrations and now R. completes it by showing Dante's reflection at the very bottom of the very end . . .

This last canto is susceptible to psychological interpretation. R. has followed the text with his visual counterparts but his purpose is to lead up to the psychological illusion of the climax and finale. At the top of the page are telephone and power lines — R.'s mechanical suggestion for keeping Hell frozen. Then, three-headed Satan, described by Dante in three colors — yellow, red and black — is shown anchored in his own icy realm, beating his great wings (which R. indicates as insect wings and cross-sections of airplane wings) and munching three great betrayers: Judas, Cassius and Brutus. Strewn in the icy reaches are the bodies of unspeakable sinners, one described by Dante as "like a bow, bending foot to face." . . .

Virgil reminds Dante that night is coming on and they must hasten. He once again carries Dante, this time down

the shaggy matted flanks of Satan where suddenly, for no explicable reason, he shows signs of being flesh-and-blood. Dante describes him as wheezing and suffering great strain. R. pictures Virgil for the first and only time as a non-shade. Then Virgil performs the feat of turning upside-down and climbing the flanks where once he descended remarking significantly: There is no way but by such stairs to rise above such evil. Thus has Dante confronted Evil directly and completed his cathartic excavation in his own soul.

What happens physically in these last lines is, even according to Dante, perplexing and difficult to follow. R. isolates only the most significant idea: that Dante has reached the center of gravity and thereafter must be right-side-up instead of upside-down literally and figuratively. He draws a half-erased image of Dante on the ledge below Satan to indicate Dante's great crisis: "I did not die and yet I lost life's breath." Then, in a mirror reflection, he shows Dante emerging into the light of the heavenly divine, a spherical enclosure of ethereal colors. As R. has said, if the page were turned upside-down it would encompass Dante's complicated denouement with equal efficiency.

My own collaboration with Dante-Rauschenberg has proved to be a source of great satisfaction. Rauschenberg and I read the poem together, speaking about Dante's ineffable pride, his sly witticisms, his digs at his artistic rivals, his occasional pique and silliness (for example his unreasonable and quite medieval prejudice against the giants merely because they are outsized) his political shrewdness, his lyrical abandon, his extraordinary feeling for the particular, his forthright language, and above all, his great artistic inconsistencies. Finally it is Dante's flexible imagination, capable of assuming different guises at different times and, like the modern artists, of playing ambiguously around the great themes, that distinguishes the poem and makes it possible to read it in the 20th century.

## MUSIC

(Continued from page 9)

was much more of his living soul  
than was the hand of his body  
which moved the pen

If those lines haven't sold you the book, you have no taste for poetry.

Here is the language with which we should be writing and speaking, yes, and acting, not the administrative, institutional, the "specifically trained" dead standard language of the professionals, the commissions, the committees, who talk of doing something for and about the arts.

When Theodore Roosevelt was President he read a book of poetry by Edwin Arlington Robinson, and when he learned that Robinson was destitute, without a job, impractical as a poet and determined to be one nevertheless, Teddy found him a job and talked him up. He didn't save him; he made it possible for Robinson to get his feet on the ground. Robinson didn't keep the job long. It probably meant more to him to have been recognized, unknown, as a poet by the President of the United States.

T H E M A G A Z I N E

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### HONORS & AWARDS

The new Environmental Design building under construction at the Univ. of Calif., Berkeley, has been named William Wilson Wurster Hall in honor of retired DEAN WURSTER who headed the College of Architecture from 1950-59 then became dean of its successor, the College of Environmental Design.

NIKOLAUS PEVSNER, art historian and critic, has been named recipient of Yale University's Howland Memorial Prize conferred biennially "in recognition of distinguished achievement in literature, the fine arts, or the science of government."

ADOLPH GOTTLIEB, New York-born artist, has won the Premio Prefeitura de Sao Paulo, the highest award given at the VII Sao Paulo, Brazil, Biennal. He is the first American (North or South) to win the award.

Los Angeles entrant ROSE BAUMRUKER was presented the \$1000 Lytton Savings and Loan of Los Angeles Purchase Award, first prize in the California Water Color Society's 43rd Annual National Exhibition at the Otis Art Institute.

THOMAS B. MOON, graduate of the Univ. of Southern Calif. School of Architecture and Fine Arts, has been awarded the \$500 Work-Travel Scholarship recently established by the Architectural Guild, a support group for the school. The award permits graduates to work for a year in a foreign architectural office.

First Honor Award Winners in the Central Arizona Chapter, AIA 1963 competition went to BENNIE M. GONZALES, RALPH HAVER & ASSOCIATES AND EDWARD L. VARNEY & ASSOCIATES, and CALVIN C. STRAUB.

### APPOINTMENTS

GEORGE A. HINDS: professor of architecture at the Univ. of Illinois. Hinds is a Yale graduate with degrees in architecture and city planning.

Sculptor ERWIN F. HAUER: visiting lecturer in sculpture at Rhode Island School of Design during 1963-64.

New officers of C.A.I.M. elected at the 12th International *Conference des Architectes d'Interieur* in Copenhagen were NIL ARNE REMLOV, Norway, president; CHRISTIAN ENEVOLDSEN, Denmark, vice president; ERICH BACHTOLD, Switzerland, secretary; W. BERTHEUX, Holland, secretary; and W. KLETTE, Germany, treasurer.

RICHARD KOPPE, painter and sculptor, has been named to the faculty of the Univ. of Illinois Art Department as associate professor of art.



George A. Hinds



Los Angeles County Hollywood Museum of the motion picture, television, radio and recording industries. William L. Pereira & Assoc., architects. Hollywood Bowl parking lot in foreground.

### GRANTS & SCHOLARSHIPS

The New York Chapter, AIA, announced that it is accepting applications for the \$2,000 1964 James Stewardson Travelling Fellowship, awarded annually to architectural draftsmen or architects not practicing as principals in an architectural firm.

A \$5,000 fellowship for study or research related to urban design has been established by the Pittsburgh Plate Glass Foundation to be awarded through the American Institute of Architects Foundation, Inc. The recipient must be a student or a graduate accepted for advanced studies at one of the member or associate member schools of the Association of Collegiate Schools of Architecture in the U. S.

A \$500 memorial scholarship fund in memory of Charles Winthrop Lea has been established at the Univ. of Wash. College of Architecture and Urban Planning to be awarded annually to a student of the college.

The Edward Probst Graduate Fellowship in Architecture providing an annual grant of \$2,500 (\$3,000 for married students) plus tuition and fees has been established at the Univ. of Illinois by the firm of Graham, Anderson, Probst and White of Chicago. The award will be made by the Department of Architecture to an outstanding student of its selection.

### COMPETITION

A national competition for the design of a shopping center incorporating a fallout shelter with cash prizes totaling \$55,000 has been announced by the AIA. The competition, sponsored by the Defense Department, is open to architects and engineers registered in the U. S. and to faculty members of accredited architectural and engineering schools. A grand prize of \$15,000 will go to the top entry selected from among eight regional winners. Seven regional first prizes of \$4,000 and eight second and third prizes of \$1,000 and \$500 will also be awarded. Program and forms can be obtained from A. Stanley McGaughan, Professional Advisor, National Community Fallout Shelter Design Competition, 1341 New Hampshire Ave., N. W., Washington, D. C. 20036.

### CONFERENCES & LECTURES

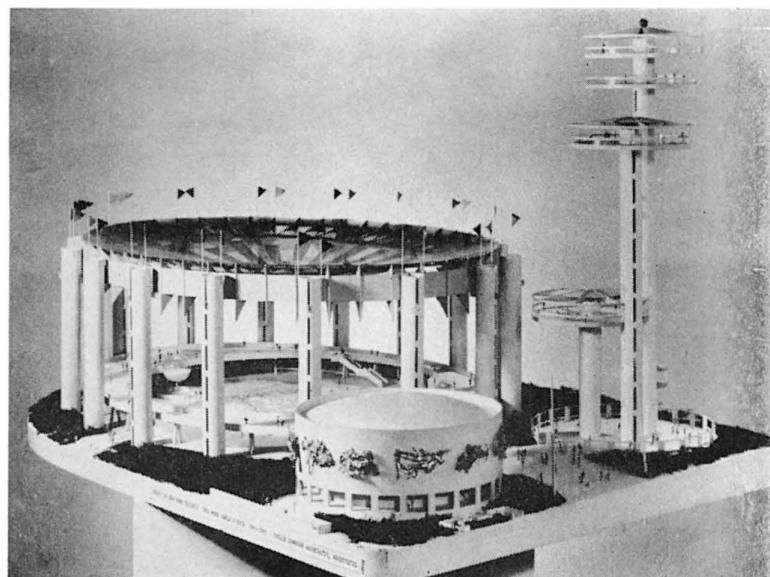
The 17th Annual Meeting of the Society of Architectural Historians will be held at the Sheraton Hotel in Philadelphia from Jan. 30 to Feb. 2, held jointly with the College Art Association of America.

"Liturgy and Architecture" is the topic of a symposium to be held at Clarke College, Dubuque, Iowa, Jan. 10-12.

Russell Lynes will give a lecture Thursday, Dec. 5 at 8 p.m. in Hancock Hall, Univ. of Southern Calif.

### ARCHITECTURAL PANEL

The Los Angeles Architectural Panel and the Alumni of the Art Center Society will present a trio of rare films Dec. 6 at 8 p.m. in the Union Oil Center. The films are "Opening in Moscow", the 1959 American Exhibition in Moscow, by George Nelson; "Moon Bird" by John Hubley; and "The City" by John Urie. Public invited. Donation \$1.

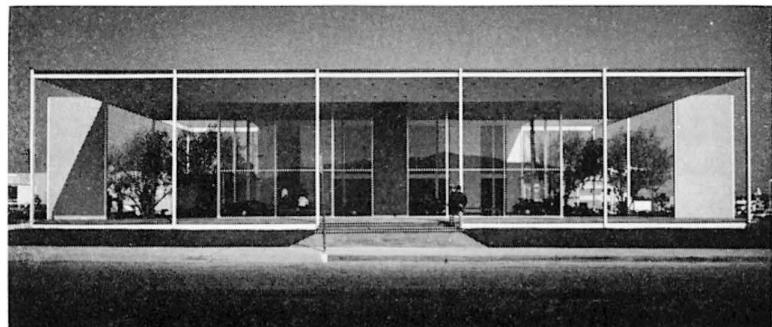


"Tent of Tomorrow" N. Y. State Pavilion for the New York Fair, by Philip C. Johnson Assoc. Catenary plastic roof hung from peripheral columns. Structural engineer: Lev Zetlin.

## SOUTHERN CALIFORNIA CHAPTER AIA AWARDS 1963

Eleven buildings were given special recognition by the Southern California Chapter, American Institute of Architects, its Triennial Honor Award program.

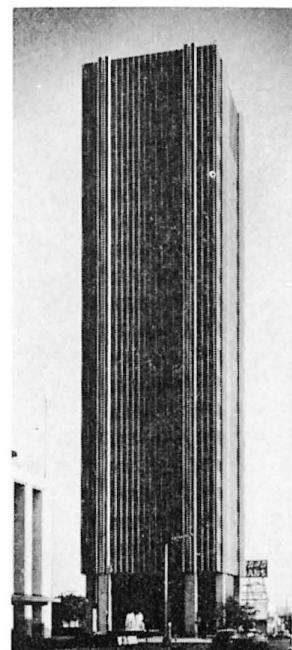
Twenty-six buildings were originally selected by an international jury of Ernest J. Kump, FAIA, Palo Alto, Harry Weese, FAIA, Chicago, Sir Basil Spence, O.M., R.A., London, England, Otto Glaus, Dipl. Arch. BSA. SIA, Zurich, Switzerland, and Kenzo Tange, Tokyo, Japan. From these 26 a jury of former honor award winners selected 11 deserving special recognition.



1. DUFFIELD LINCOLN-MERCURY AGENCY LONG BEACH. KILLINGSWORTH, BRADY, SMITH & ASSOC. PHOTO: JULIUS SHULMAN.



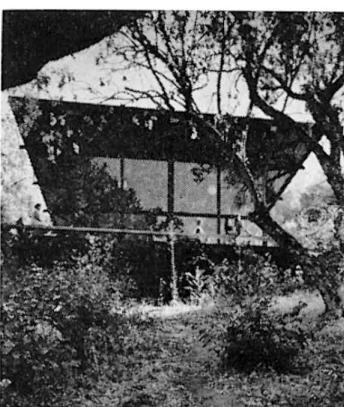
3. SMITH AND WILLIAMS OFFICE BUILDING  
SOUTH PASADENA. PHOTO: MARVIN RAND.



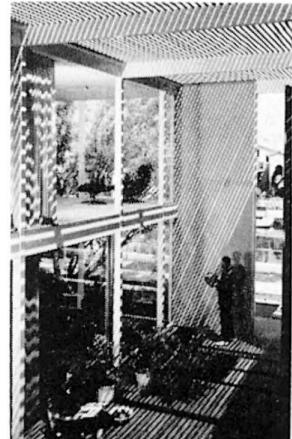
4. HONNOLD & REX—OFFICE BLDG.  
HOLLYWOOD. PHOTO: JACK LAXER.



2. ST. JOHN'S SEMINARY COLLEGE—CAMARILLO. ALBERT C. MARTIN & ASSOC. PHOTO: JACK LAXER.



6. WYLE RESIDENCE, NORTH FORK, CALIFORNIA, HONNOLD & REX. PHOTO: LELAND LEE.



7. CASE STUDY HOUSE NO. 25. KILLINGSWORTH, BRADY, SMITH & ASSOC.



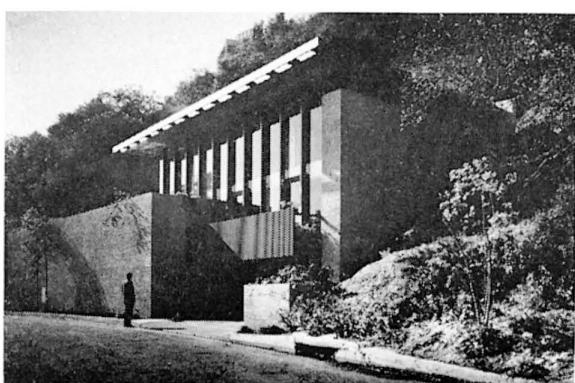
5. SPACE TECHNOLOGY LABORATORY—REDONDO BEACH. ALBERT C. MARTIN & ASSOC. PHOTO: ROBERT C. CLEVELAND.



9. OFFICE BUILDING, FULLERTON. WILLIAM PEREIRA & ASSOC. PHOTO: JULIUS SHULMAN.



6. PUBLICATION ENGINEERS BLDG. DAN DWORSKY. PHOTO: MARVIN RAND.



10. RESIDENCE. CARL MASTON. PHOTO: JULIUS SHULMAN.



11. OFFICE BLDG. IN PASADENA. PULLIAM, ZIMMERMAN & MATTHEWS. PHOTO: MARVIN RAND.

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(1) A complete package of information literature on new Armstrong Ventilating Acoustical Ceiling systems has been compiled for architects and engineers by the Building Products Division of the Armstrong Cork Company. Fully illustrated brochure gives complete details on basic operation of the new ceiling system, shows how it reduces air conditioning costs through elimination of air diffusers and a large amount of supply duct work; case histories of actual installations; available at no extra cost. Armstrong Cork Company.

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(5) Handsome illustrated folder describes and gives complete details on the Container Corporation of America Color Harmony Manual based on the Oswald system, and designed to improve the planning and use of color by artists, designers, manufacturers and consumers. Folder includes sample color chip. Container Corporation of America.

(6) Interior Design: Crossroads have all the components necessary for the elegant contemporary interior. Available are the finest designed products of contemporary styling in: furniture, carpets, draperies, upholstery, wall coverings, lights, accessories, oil paintings,

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(7) Stained Glass Windows: 1" to 2" thick chipped colored glass embedded in cement reinforced with steel bars. A new conception of glass colored in the mass displays decomposing and refracting lights. Design from the pure abstract to figurative modern in the tradition of 12th century stained glass. Roger Darricarrere.

(8) Plywood For Today's Construction, a new catalog with basic information about fir plywood properties, grades, types and uses has been published by Douglas Fir Plywood Association. The 20-page booklet, indexed for A.I.A. filing systems, also contains information about special products and about plywood floor, wall and roof construction systems. A special new section discusses plywood component construction. Single copies of the booklet S62 are free. Douglas Fir Plywood Assn.

(9) Two new pamphlets on folded plate roofs and stressed skin panels are available from the Douglas Fir Plywood Association. Each brochure contains structural details, illustrations and descriptive text; valuable addition to any collection of data on components; updates previously available information; other booklets in the component series describe box beams, curved panels, trusses and pallets. Available free to architects, fabricators, and builders. Douglas Fir Plywood Association.

(10) Furniture: A complete line of imported upholstered furniture and related tables, warehoused in Burlingame and New York for immediate delivery; handicrafted quality furniture moderately priced; ideally suited for residential or commercial use. Dux Inc.

(11) Contemporary Fixtures: Catalog, data good line contemporary fixtures, including complete selection recessed surface mounted lense, down lights incorporating Corning wide angle Pyrex lenses, recessed, semi-recessed surface-mounted units utilizing reflector lamps; modern chandeliers for widely diffused, even illumination; Luxo Lamp suited to any lighting task. Selected units merit specified for CSHouse 1950. Harry Gitlin.

(12) A new, 12-page executive furniture catalog has just been completed by Hiebert, Inc., manufacturers of a complete line of executive office furniture. New catalog contains detailed illustrations of the line, including executive desks, secretarial desks, side storage units, corner tables, conference table, executive chairs, and side chairs. The center spread features a full-color photograph showing the various Hiebert furniture pieces. Copies of the catalog may be obtained free of charge. Hiebert, Inc.

(13) The 36-page Hotpoint Profit Builders catalog for architects and builders contains specifics on Hotpoint's full line of products, including built-in ovens, dishwashers, dis-

posers, heating devices, refrigerators, ranges, air conditioners, laundry equipment. Also included are diagrams of twelve model Hotpoint kitchens with complete specifications for each. Hotpoint.

(14) Interpace has published a 6-page brochure on the new Contours CV, a lightweight ceramic architectural facing for exterior and interior use. The brochure features photographs of 12 standard designs in a wide pattern variety ranging from those achieving medallion effect to ones which vary the play of light. The brochure also details dimensions for individual custom designs which can be designed up to 11 1/4" x 11 1/4". International Pipe and Ceramics Corp.

(15) Catalogs and brochures available on Multalum and X-Alum series of contemporary furniture designed by George Kasparian. Experienced contract dept. working with leading architectural and interior design firms. Kasparians, Inc.

(16) Complete line of furniture designed by Florence Knoll, Harry Bertoia, Eero Saarinen, Richard Shultz, Mies van der Rohe and Lew Butler as well as a wide range of upholstery and drapery fabrics of infinite variety with color, weave and design utilizing both natural and man-made materials. Available to the architect is the Knoll planning unit to function as a design consultant. Knoll Associates, Inc.

(Continued on next page)

### Circle Number for Desired Literature and Information (card good until 3-31-64)

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(17) Lietzke Porcelains announces the addition of two new shapes to their line of porcelain cabinet pulls bringing the line, designed for the use of architects and interior designers, to a total of eight designs. All pulls available in four colors delivered from stock: white, black, cerulean and amber. On custom order pulls can be produced in ten additional colored glazes. Literature, free upon request, contains samples on full color line. Sample board with the eight shapes in the four stock colors can be had for \$5.00 f.o.b. Mogadore, Ohio. Lietzke Porcelains.

(18) Lighting: A completely new 12-page, 3-color brochure of popular items in their line of recessed and wall mounted residential lighting fixtures is now available from Marco. The literature includes typical installation photos as well as complete specifications on all items. Marvin Electric Manufacturing Company.

(19) The J-21 Convertible Housing by Marco converts an incandescent recessed housing fixture from a square to a round unit with an assortment of 21 trims. This new 2-in-1 housing is available from Marvin Electric Manufacturing Company.

(20) Contemporary Clocks and Accessories. Attractive folder Chronopak contemporary clocks, crisp, simple, unusual models; net lights and bubble lamps; George Nelson, designer. Brochure available. One of the finest sources of information, worth study and file space.—Howard Miller Clock Co.

(21) Lanterns, a major innovation in lighting designed by George Nelson and manufactured by the Howard Miller Clock Company, are shown in a two-color, four-page brochure. The illustrations show all 21 styles in four models—ceiling, wall, table and floor—and include the large fluorescent wall or ceiling unit designed primarily for contract installation. Each is accompanied by dimensions and price. Distributed by Richards Morgenthau, Inc. Howard Miller Clock Company.

(22) Selections from the diversified decorative accessory collections designed by George Nelson for the Howard Miller Clock Company are presented in a new il-

lustrated, four-page brochure, available to architects and interior designers without charge, upon request. The brochure covers clocks (both built-in and surface mounted); bubble lighting fixtures; net lights; planters; room dividers; and the versatile space divider, Ribbonwal. All information necessary for specifying is provided. Howard Miller Clock Company.

(23) Write for complete new catalog on Wee-Mac accent, recessed and surfaced 12-volt lighting fixtures that are adjustable, blended and hidden light with choice of finishes. Also Allura-Lite complete 12-volt garden lighting system that yields a soft glow rather than usual harsh light, featuring simplicity of installation and flexibility. Montrose Lighting.

(24) "The pleasure of planning your home with Mosaic Tile," a new 24-page brochure, depicts unusual uses of tile and presents a variety of home planning ideas; large selection of handsome color photographs. Tiled steps, hallways, tiled fireplaces, kitchens, bathrooms, patios and swimming pools show the versatility and wide color choices as well as low maintenance costs and lifetime advantages of ceramic tile. Mosaic Tile Company.

(25) Completely new full-color 28-page catalog of Mosaic ceramic tile manufactured in California and distributed throughout the area west of the Rockies. First presentation in booklet form of tile in the Harmonitone color families; includes decorated glazed wall tile, new Staccato palette in one inch square tile, and Byzantine. Catalog available upon request. The Mosaic Tile Company.

(26) Northrop Architectural Systems' product lines include Arcadia sliding windows, available in a wide range of stock sizes, and Arcadia aluminum sliding glass doors in stock and custom designs, including the Acme 500 sliding glass door for light construction. The details of the single glazing and insulating glass and all other well known features of Arcadia doors and windows are presented in three catalogs—a 12-page catalog on doors, an 8-page catalog on windows and one dealing with the Acme 500. Northrop Architectural Systems.

(27) Store Fronts and Entrances: Northrop Architectural Systems includes full Acme line of architectural aluminum storefronts and entrances. Known for advanced and economical design, Acme includes encapsulated floor closers, strong door corners and entire snap-together framing systems. A 16-page catalog is available. Northrop Architectural Systems.

(28) Window Wall Systems: New 8-page catalog presents the Arcadia 800 Series Window Wall Systems of aluminum framing for self-contained floor-to-ceiling installations. Any desired configurations of fixed, sliding, spandrel or transom panels, door frames or special windows are possible. Northrop Architectural Systems.

(29) Sun Control: New 8-page catalog describes the Arcadia Brise Soleil sun control systems, which combine engineered sun control with broad flexibility in design and finish. Can be engineered to provide up to 100% shading, while retaining twice the horizontal visibility of ordinary louvers or sun screening. Northrop Architectural Systems.

(30) Recessed and Accent Lighting Fixtures: Complete range of contemporary recessed and surface designs for residential, commercial applications. Holiday pendants, gay, colorful combinations of hand-blown colored or satin opal glass as well as metal shades. Light-form fixtures—soft satin thermopal glass in glowing geometric shapes for unusual decorative effects. Prescolite Manufacturing Corporation.

(31) Reiner Industries' Swepe system of remote control can provide instantaneous control of all electrical devices from master control points. The Swepe units may range from the light control of a single room to the master control of the whole building or home. Each unit consists of illuminated, name-plated buttons mounted in a continuous strip, which can always be extended. Available also is a portable remote control unit. Reiner Industries, Inc.

(32) Manufacturers of contemporary furniture, featuring the Continental and "Plan" Seating Units, designs by William Paul

Taylor and Simon Steiner. Selected Designs, Inc.

(33) Appliances: Thermador presents two new brochures. The 14.2 cubic foot Refrigerator-Freezer is featured in one brochure. All sections of the interior are explained in full; choice of colors and detailed specifications are given. The second brochure colorfully illustrates Thermador's Bilt-In Electric Ranges. The special features of the Bilt-In Electric Ovens, such as the Air-Cooled door, 2-speed rotisserie, scientifically designed aluminum Broiler tray, are shown. The Thermador "Masterpiece" Bilt-In Electric Cooking Tops are detailed. Thermador Electric Manufacturing Co.

(34) Full color illustrated brochure describes new Thermador Bilt-In Dishwasher: stainless steel is used for actual tank and inside door liner of washing compartment eliminating chipping, staining, rusting, odor problems, specially developed insulating, sound-deadening material makes operation nearly noiseless; new exclusive "washing arm", food residue separator, drying system, completely automatic, service-free controls; style and color co-ordinated with other Thermador Bilt-In kitchen equipment; brochure gives detailed specifications. Thermador.

(35) Wall Furniture: Broad and versatile line of wall-hung furniture, manufactured and warehoused in Los Angeles; the Peter Wessel wall furniture line is of the highest quality and workmanship constructed of genuine walnut, oil finished. Special custom finishes, color matched to customer's selection. Ideal for home, office, and institutional use. Catalog and price list available. Peter Wessel Ltd.

(36) Norwegian Furniture: Complete collection of outstanding Norwegian imports. Upholstered furniture and related tables, dining groups, specialty chairs, modular seating groups. Teak and walnut; included in the collection is an outstanding selection of fabrics of bold contemporary color and design. Immediate delivery. Peter Wessel, Ltd.

(37) Filon Corporation offers a 4-page brochure on FiLite, the translucent Fiberglas ceiling panels, which insure even, shadow-free light diffusion for the home, business and industry. Also available is the newly revised and expanded AIA file containing complete product data and technical specifications for Filon products. Filon Corp.

(38) Key to Elevator Planning. A 12-page brochure is available containing hatchway and penthouse layout information and standards for hydraulic and electric passenger and freight elevators. The National Association of Elevator Contractors.

(39) New "Color Edge" line features tough specially compounded cellulosic plastic T-moldings, designed for exceptional durability, easy application and decorative appearance at low cost. Also new flexible vinyl moldings, track for sliding doors and a complete selection of wallboard trim. A six-page color brochure is available upon request. Plastiglide Manufacturing Corporation.



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Literature concerning products of the manufacturers listed below may be obtained by circling the appropriate number on the Reader Service Card. Product samples are on display at the Building Center, 7933 West Third Street, Los Angeles. Most may also be seen at the San Francisco Building Center, 40 Gold Street, San Francisco.

(201) Visualite louvred windows, full frame and strip hardware, illustrating vertical and horizontal installations, with blades of wood, aluminum, and colored and clear glass. Stainless steel tension clips, an exclusive Visualite feature, insure louvre tightness in both the gear and cam operated windows. Available in standard and custom sizes. Other products include Spray Mask, to protect frames from stains and plaster burns, and Magix Metal-Lube, a silicon base lubricant. Acker and Acker.

(202) Industrial building products in aluminum, including sheeting, rib roofing, industrial siding, etc. Also have available information on hand rails wrought aluminum products, curtain walls, store fronts, windows and doors. Aluminum Company of America.

(203) Amtico Permalife vinyl flooring, solid vinyls that are available in 20 patterns and unlimited custom colors as well as in conductive tile, Amtico Carefree vinyl, a budget priced flooring with no paper backing, in 5 modern patterns and a wide choice of decorator colors, Amtico vinyl and polymeric resins for above-grade, on-grade and below-grade installations, available in 12 colors, and Amtico rubber and plastex rubber flooring in marbleized patterns featuring 22 colors. American Bilt-Rite Rubber Co.

(204) Illuminated sign and display cabinets, UL approved for exterior and interior use, available in a variety of baked enamel on aluminum finishes. American Display Cabinet Company, Inc.

(205) American Maid shower doors and tub enclosures featuring decorative laminated glass and acrylic panels with gold, satin and polished frames. Also available in other plastics and wire glass and in special anodized finishes. American Shower Door Company.

(206) Manufacturing a complete line of quality paint products and exhibiting the Color Key library, an original method of color selection. Divided into Color Key #1 and Color Key #2, the method separates the entire spectrum into only two palettes with the colors in each mechanically related for total harmony to facilitate the pre-selection at a glance of the entire range of colors for all decorating. Ameritone Paints by Vi-Cly Industries.

(207) Manufacturers of Anti-Hydro, Aridsil and Amurseal waterproofing, Amortop hardener and the new Demicon Curehard, the single application material to cure, chemically harden and dust proof concrete. A written guarantee is available on Anti-Hydro Products when application is supervised by a factory representative. Anti-Hydro Waterproofing Company.

(208) Supplier of Baxco C2C (Chromated Zinc Chloride) for pressure treatment of lumber to guard against termites and dry rot in foundations, sub-floor framing and sheathing, and of Baxco Pyre-

sote for pressure treatment of all lumber to resist fire and flame spread termites, insects and dry rot. Both materials are approved under I.C.B.O. research recommendations and each piece of Pyresote pressure treated lumber bears an Underwriters' Laboratories, Inc. label. J. H. Baxter and Company.

(209) Architectural letters and plaques in bronze, brass, aluminum and nickel. Also, custom fabricators of all types of architectural metal work including stairs and handrails, store fronts and entrances, window walls, solar screens, flag pole holders, cast aluminum mail boxes and bank depositories, plus elevator entrances, doors and frames, elevator cars, and conveyors. A. J. Bayer Company.

(210) Manufacturers of aluminum railings and grilles including the deluxe-line recommended for schools, Grill-O-Metrics grilles in 3 dimensional geometric patterns, Bar-O-Metrics panels constructed with inlaid facets, illuminated wall brackets and pipe rail adjustable fittings. New developments include rod couplings to permit decorative treatment to floating stairs, and vinyl handrail grip for a complete wrap around covering. Blumcraft of Pittsburgh.

(211) Producers and exhibitors of Desertone, a natural colored crushed rock for roofs, landscape gardening, terrazzo, concrete aggregate, aggregate transfer and seal coat on black top road mix. The natural colors include green, brown, red, pink, gold, turquoise, lilac, black and white and sizes run from 7/16 inch screen to the special 4 and 6 inch rock. Brubaker-Mann Company.

(212) Rubber and vinyl tile flooring in 51 marbleized and plain colors with rubber cove base to match. Also display rubber stair treads with matching tile and base. Special color matches are available at no extra charge on orders of 2000 square feet or more. Burke Rubber Company, Inc.

(213) Manufacturers of Cabots stains, oils, waxes and colloidal paints for preserving, protecting, and coloring all types of exterior and interior woodwork, as well as adhesive products, damp-proofing and clear waterproofing materials for brick and concrete. Samuel Cabot, Inc.

(214) Colored vinyl link mats and runners in weave widths of  $\frac{1}{2}$ ",  $\frac{5}{16}$ " and  $\frac{3}{8}$ ", fashioned to specifications. Also manufacture tire fabric link mats and runners, and rubber and vinyl matting. Cactus Mat & Patch Manufacturing Company.

(215) Colored, decorative glass panels by Jim Weaver executed from the architect's own pictorial or abstract design, including motifs that carry from solid to transparent areas. Cal-Western Manufacturers.

(216) Exclusive distributors of Monkey Pod hardwood plywood paneling and suppliers of all types

of hard and soft plywood, masonite, and Formica decorative laminates. California Panel and Veneer Co.

(217) An association of member mills whose Redwood lumber is properly seasoned, graded and milled under close supervision and given the CRA Trademark of quality Redwood. Both finish and construction grade Redwood are available for siding, paneling, facia, finish and millwork. California Redwood Association.

(218) Roof deck systems and insulation, Bermuda roofs, fireproofing, fiber forms, acoustical treatments, insulating materials and loose fills based on the light-weight, fireproof qualities of Zonolite. California Zonolite Company.

(219) Manufacturers of Blue Flame fireplace log lighter and the A.G.A. certified Blue Flame gas valve, available either separately or in a combination pack. Canterbury Enterprises.

(220) An extensive line of decorative panels for sliding, folding or fixed partitions. Unlimited designs are available including carved wood grille patterns, the palisade panel for use as an opaque room divider, and panels with inserts of perforated metals, fabrics and translucent plastics. All feature the exclusive overhead hardware and bottom guide and quality hardwood frames. Carlton Products.

(221) Dex-O-Tex latex base troweled-on flooring and roof deck coverings which include special decorative terrazzos, static conductive floors, industrial flooring and acid proofing, underlays, adhesives and marine products. Crossfield Products Corporation.

(222) A complete line of washroom dispensers for commercial and industrial buildings including chrome roll dispensers, recessed towel dispensers and waste receptacles in satin buffed stainless steel and prime coated steel and towel and tissue dispensers in chrome, white, stainless steel, copper plate, and Kromotex finish in green, bronze and gray. Crown Zellerbach Corp.

(223) Structural clay products including Steelyd brick, Imperial brick with cellular openings to create static air space for insulation and less weight, and Bel Air flats for walkways, decorative veneer, wall capping patios, pool decks and window ledges. Davidson Brick Company.

(224) Ply-Sawn, the Douglas fir siding for a new dimension in exterior siding, and random plank Philippine mahogany plywood paneling from Mindanao and Luzon, either unfinished or pre-finished, for use as an interior wall finish. Davidson Western Plywood Co.

(225) Maintains a continuing policy of programs and informational services for the architects, including the Gold Medallion Seal for residential construction and the exclusive Merit Award for commercial and industrial buildings that conform to required standards of excellence in electrical installation. Information on these is available from the department's residential or commercial utility consultants. Department of Water and Power.

(226) Styrofoam, a feather-light board of expanded polystyrene for

concrete forms, floor, wall and roof insulation, insulating plaster base and pipe and vessel covering. Also manufacture Saraloy 200 and poly-film waterproof membranes Saraloy 400 elastic flashing Scorbord insulating board, Roofmate FR roof insulation and the Miller dry wall system. The Dow Chemical Company.

(227) Plastifeutre, a resilient floor covering of vegetal felt backed by jute burlap canvas, coated with plastic, for use indoors and out, over wood, concrete and tile, where a carpeting effect is impractical but desired. Available in four patterns and a variety of colors, and suitable also as a covering for interior walls. European Chemical Corporation of America.

(228) Execute scale models of all types of buildings and site developments stressing details in design and materials. Glenn Evans Miniatures.

(229) Manufacturers of intercommunication and sound systems for schools, hospitals, medical buildings, commercial structures and residences, with consultation service for layouts available for any type application. Executone Systems of Southern California.

(230) Laminart, a high pressure decorative laminated plastic, manufactured in Los Angeles. The new line, with samples available at the display, includes solid colors, wood grains, decorator, and special patterns. Fabricon Products, Division of Eagle Picher Company.

(231) Natural, cellular, lightweight lava stone for garden display and masonry veneer in a color range from light grey to charcoal, as well as sierra tan, and available in varied sizes, shapes and custom cutting. Featherrock, Inc.

(232) Manufacturers of roofing materials including built-up roofing, Rex-Kote, Acrylic Coat, aluminum reflective and asphalt emulsion coatings, and Uni-Thik asphalt shingles. Also make concrete forms and Monoform water-proofing membrane, acoustical tile, insulating materials including board, batt, roll and Canec roof insulation, Cel Dek structural building board and Tred-Top and Flint-Mastic bituminous flooring. The Flintkote Company.

(233) A high pressure plastic laminate in solid colors decorator designs and wood grains with up-to-date samples available at the display. A Formica exclusive is the custom design service of sealing murals, designs and art treatments to Formica. The newest development is the brushed finish laminate surfacing for kitchen cabinetry. Also available are Formica flush faced doors. Formica Corporation.

(234) An extensive line of overhead doors including wood, both paneled and carved, and the new Filuma door of Fiberglas and aluminum for garages, and a variety of doors for commercial and industrial use. Featured in the display is a working model of the new telescoping movable center post for unimpaired clearance in multiple door installations with the safety factor of non-closing unless the post is in place. Also manufacture hardware for all

types of sectional and rigid doors, operators, weatherstripping, pass doors and rosettes. Frantz Manufacturing Company.

(235) An extensive line of concrete block, both structural and veneer, including Flagcrete, Limestone, Slumpstone, Terracrete and Viking Stone, as well as sculptured and flat concrete screen block. General Concrete Products, Inc.

(236) Textolite, the high pressure decorative laminate in both conventional and textured surfaces with samples available in the solid colors, decorator designs and wood grains. The latest development is the Candy Stripe pattern for commercial installations featuring a 2-inch stripe running the width of the sheet. General Electric Laminated Products.

(237) Koroseal, a vinyl wall covering of precision calendered vinyl sheet welded to flame-retardent fabrics. In a wide variety of high styled and functional patterns, it is registered and approved for flame-retardance by the California State Fire Marshall. B. F. Goodrich Co.

(238) Illustrations of a complete line of acoustical tile, including wood fiber, mineral and fire rated, and samples of special sizes and colors which the firm features. Also has available suspension systems, integrated lighting, luminous panels, mouldings and other accessories for acoustical work. O. P. Grani, Inc.

(239) Handcraft Tile, a hand-burned, slip glazed, handmade ceramic tile available in many standard units or, on request, in practically any design required. Colors include over 25 warm, desert tones, subtle pastels and striking modern hues, with hand buffed, textured and mottled surfaces adding character to the overall effect. Handcraft Tile, Inc.

(240) A complete line of common brick for reinforced grouted brick masonry construction, including standard, oversize and modular units in a variety of textures. Higgins Brick and Tile Company.

(241) Marvel interior finish in color or as a base for paint, exterior stucco in a wide choice of weather-resistant colors, Marblecrete finish in color and imbedded with exposed pebbles or marble chips, acoustical-type textured plaster for use where acoustical properties are not required, Hi-Sorb acoustical plaster in many colors, and a swimming pool finish resistant to acids and algae. Highland Stucco and Lime Products Co.

(242) A complete line of jamb type garage door hardware and accessories for all doors and weights, both residential and commercial, also, structural devices such as joist hangers, anchors, connectors, "T" and "L" straps, concrete form ties and related items. Distribute the Hollywood Wonder Action Disappearing Stair. Holmes Hardware and Sales Company.

(243) Manufacturers of Hoertiron steel folding gates for all types of commercial installations. Also available, when appearance is the predominant factor, folding gates of cold rolled steel, aluminum or

bronze constructed of cold formed end and track sections to receive ball bearing rollers, machined bearings and brass washer construction, built-in cylinder locks for standard or master-keyed cylinders and flush wall cabinet to receive gates. Hoertig Iron Works.

(244) Manufacturers of putty and caulking compounds for all glazing and caulking problems, including Hunco architectural caulking compound for use where a permanent elastic expansion joint is required and Hunco commercial caulking compound used as a sealant for cracks, joints and around door and window frames. H. R. Hunt Putty Manufacturing Company.

(245) Aluma-Roof, the fire resistant, all aluminum, interlocking heavy butt shake shingles in custom colors for application over two-ply 30# felt base and recommended for use on roofs with a 4 in 12 minimum pitch. Hunter Aluma-Shake, Inc.

(246) Hydro-T-Metal, a homogeneous, non-ferrous alloy of zinc, copper and titanium which offers the longevity benefits of copper at much reduced cost. The material is used for sheet metal work and plaster accessories as no painting is necessary initially or for maintenance. Hydrometals, Inc.

(247) A masonry veneer of fabricated stone with the realistic appearance of quarried stone. Made of concrete, crushed rock and sand, it is available in a variety of natural colors and comes in sheets approximately 3' x 4' in size and one inch thick. It can be used as an exterior or interior finish. Loma Stone Sales Company, Inc.

(248) A variety of colors and textures in facebrick including Norman, Roman, Colonial Amsterdam, Economy Norman, Hillcrest Splits and Alberhill Pavers. Also manufacture Kord Modular and oversize common brick, fire brick and flue lining. Los Angeles Brick & Clay Products Company.

(249) Vetrum venetian glass mosaics, Lake Como Italian pre-cast marble mosaic tile with recessed or smooth surfaced matrix, Cremona and Appiani Italian quarry tile, Latco vitreous porcelain ceramic glazed or unglazed tile, and decorative tile from Spain and Holland, for use on exterior and interior walls and floors. All are available in a myriad of colors and patterns. Los Angeles Tile Jobbers, Inc.

(250) Dual Window Wall, a system consisting of a metal louvre exterior with glass louvre interior, both movable. Also manufacture aluminum louvre windows, frame or strip hardware, Roller King aluminum rolling windows and doors, and Aqua King shower and tub enclosures. Louvre King, Inc.

(251) Cam operated, stainless steel, louvre window strip hardware and overhead suspended aluminum rolling window with Fiberglas screen. Also manufacture an aluminum nail-on surround for louvre windows with steel or aluminum hardware and a bottom rolling aluminum sliding glass doors. Louvre Leader, Inc.

(252) The Series 300 aluminum sliding window for commercial use and the Capri Cavalier aluminum

sliding door with outside slide design. Also available is the residential line including the Rollmaster, an aluminum sliding window with both sections removable, and the Capri Cadet aluminum sliding glass door. Lujon Corporation.

(253) Marlite plastic finished wall panels for residential, commercial and industrial use, featuring wood grain reproductions, decorator patterns and pastel colors available in sheets and planks and developed by Raymond Loewy Associates. Also exhibit Korelock, a hollow core paneling which requires only a backing of studs or solid nailing or furring strips. Marsh Wall Products, Inc.

(254) Manufacturers of roof scuttles of heavy steel construction with spring levers and lock and padlock hasp, and steel ceiling hatches. Both products are available in special materials and sizes. Metal-Tite Products.

(255) Ornamental garden art in cast stone, including statuary and bowls for fountains and a variety of designs and shapes in garden benches and planters. Available in natural or white as well as custom work in colors to match almost any decorative scheme, for indoor and outdoor use. Monterey Garden Art.

(256) A complete custom kitchen, designed by Jeannette Copes, N.S.I.D. Included is the contemporary Paul McCobb line suited to open plan kitchens, also used for built-in storage throughout the house and assembly for office furniture, and versatile 600 Series adaptable to any period from Cape Cod to oriental modern. Cabinets are of northern maple finished in natural grains of maple, autumn- tone, fruitwood, driftwood and walnut, and in 16 decorator colors, with choice of hardware. Mutschler of California, Inc.

(257) The Viking Spacemaker, a complete sliding door pocket including door, frame and hardware, the Feather-Touch Bi-Fold wardrobe wall with Novoply core, the Cinderella mirrored sliding wardrobe door and the Feather Glide by-pass wardrobe wall, all pre-fabricated, packaged and ready for installation. Nordahl Manufacturing Company.

(258) Pictorially a full line of industrial, commercial and residential plumbing ware in both pressed steel and vitreous china. The most recent additions to the porcelain-on-steel line are the new round pullman lavatory and the corner bath-tub built around a sump. Norris-Thermador Corp.

(259) A complete line of electrical built-ins including exhaust fans, hood and fan combinations for range and oven, bathroom heaters, and ventilators, door chimes, food center, stereo, inter-com and radio combinations, and barbecues, both electric and charcoal. Nu-Tone, Inc.

(260) Wood stains made of pure pigments ground in linseed oil, including semi-transparent penetrating stains in brown and gray tones that allow the grain of the wood to show through, and heavy bodied stains that give the wood an opaque finish. Other products are the redwood, roof and special purpose stains and pre-stained wood siding. Olympic Stained Products Co.

(261) Manufacturers of built-up dor asphalt shingles. Storm-Lap asbestos shingles, roof coatings including Coolite, Colored Coolite, Alumi-shield, and Nu-White, Grip Deck roof decking, and asbestos cement siding. Also make Griplath and Type-X gypsum lath, dry-wall systems, batt and roll insulation and Mastipave bituminous flooring. Pabco Division, Fiberboard Paper Products.

(262) Distributors of and exhibiting vinyl coated wall fabric. Naugahyde and Naugawall manufactured by U.S. Rubber Co., Coated Fabrics Division, and Lackawana Leather manufactured by Lackawana Leather Co. Pacific Hide & Leather Company.

(263) Provide a courtesy service to the architects on all industrial, institutional and commercial projects to help plan for raceway apparatus closets, PBX equipment rooms, cable rise systems, main terminal room and service from the street. Pacific Telephone Company.

(264) A high-pressure decorative laminate in a wide variety of types including Genuwood utilizing genuine wood veneer, wood reproductions, solid colors, and designs and custom fabric-surfaced laminates. Parkwood Laminates received the American Institute of Interior Design International Award for excellence in design. Parkwood Laminates, Inc.

(265) Manufacturers of a complete line of A.G.A. approved heating and air conditioning equipment including the Pace Setter, Imperial and Spacesaver forced air units, Miracool all gas air conditioner, electric air conditioner for outdoor use, and Econoair, combination heater and air conditioner utilizing gas and electricity. Also make Panel-air forced air wall heater, Sabara wall heater and unit heaters with Astro-gard steel heat exchanger. The Payne Company.

(266) Pearcelite, a fabricated marble with a hard, smooth, lustrous surface, non-warping and spotting, and impervious to stains including alcohol, cosmetics and medicinal preparations. Used for walls, pullman and furniture tops, stall showers, etc. Pearcelite, Inc.

(267) Sculptured, three dimensional hardwood panels with limitless use for area dividers, doors, screens, interior sun control and decorative sound control when used on walls or ceilings. For exterior use sculptured redwood is also available for fencing, patio enclosures and various types of commercial installations. Also display Sculpturelite, a combination of solid carved wood and translucent plastic for subtle commercial lighting. By utilizing a sound absorbent pad instead of extruded plastic, acoustical qualities are obtained. Penberthy Lumber Company.

(268) Quality medicine cabinets, including the new Dubarry and Cavalier with gold and white wood frame and polished plate glass mirrors to harmonize with gold bathroom brass goods and accessories. Also display residential and apartment house mail boxes, built-in ironing board, range hoods, directories, fire extinguisher cabinets, bathroom appointments, and a complete line of building sheet metal



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specialties. Perma-Bilt Steel Products Company.

(269) Manufacturers of a quality line of devices for crowd control certified attendance records and fare and admission collection for stadiums, racetracks, fairs, auditoriums, amusement parks, subways, baseball parks, industrial plants, markets, libraries. Perey Turnstile Company.

(270) A resilient polyurethane decking, flooring and roofing plastic that is metered, dispensed and sprayed by factory approved Franchised Applicators. A pure plastic rubber, Urapol 823A, is available in a variety of decorator colors and unusual textured finishes. It is an esthetic and practical coating for concrete, wood, lightweight cellular concrete and metal as well as a remedial coating for all existing surfaces. Poly Resins.

(271) A complete line of tile including Space-Rite and Perma-Glaze ceramic tile and the Designer Series and Signature Series decorative tile designed by outstanding artists in a wide selection of colors. Also available in Summitville quarry tile. Pomona Tile Company.

(272) A complete line of turf sprinklers, various pop-up sprays, ground cover and shrub sprays, combinations, irrigators and bubblers, featuring rise openings of standard steel or iron pipe thread dimensions, and all bodies and lids of sand-molded heavy red brass. The sprinklers are designed to simplify parts, make the design of complex sprinkler systems easier, and facilitate possible future changes in a system without changing the piping and valving system. Rain-O-Mat Sprinklers, Inc.

(273) Revco built-in refrigerator and ice maker designed for the quality custom kitchen. Originators of the built-in freezers and refrigerators for wall or under counter installation, and floor standing combination refrigerator-freezer built-in. Revco, Inc.

(274) Rez quality wood finishes for interior and exterior use. These are alkyd resin derived penetrating sealers and include the clear sealer and primer, low luster Satinwood Rez, Color-Tones in 13 coordinated fashion shades, Hi-Gloss Rez, White Rez for bleached or frosted effects and Rezite, a clear exterior finish Rez Wood-Tones, Inc.

(275) Kreolite Kountersunk lug and flexible strip wood block flooring manufactured by the Jennison-Wright Corp., and Ironbound continuous strip hardwood flooring and Perma Cushion free floating resilient hardwood flooring manufactured by Robbins Flooring Co. A. B. Rice Company.

(276) Kemiko reaction type stain for all interior or smooth exterior concrete floors; Kemiko wax finishes; Col-R-Tone coloring for concrete swimming pool decks, tennis courts, public sidewalks and rough exterior concrete areas; and Col-R-Tone A for all types of asphalt paving. Also, manufacturers of Kemiko concrete waterproofing, hardeners and sealers. Rohloff & Company.

(277) Clay roofing tile including the new 680 line of light weight high

strength clay shingle tile in a variety of fired-in colors, mission and shingle tile and the rambling, rustic American Method shingle tile, all available in a number of textures and colors and offering insulating qualities and complete fire safety. San Valle Tile Kilns.

(278) Luran, the vinyl in sheet form, 6' wide, patterned by rotogravure, in unlimited colors and designs. This includes Luran standard, with resin saturated backing, for use over wood or suspended concrete floors and Luran Regency and Imperial, asbestos backed for use over any type sub-floor and embossed to avoid marks by sharp heels. All three meet FHA minimum property requirements. Sandura Company.

(279) A wide selection of hand crafted, quality hardware featuring locks, latches and ornamental background escutcheons in polished and satin brass, satin and oxidized bronze, dull black gold and satin aluminum, polished chrome and stainless steel. Also manufacture a complete line of locks for residence schools, hospitals and commercial buildings in a choice of metals. Schlage Lock Company.

(280) Manufacturers of concrete hardeners including Lithochrome, Emerchrome, and Permalith plus Lithochrome color hardener and colorwax, Chromix for coloring ready mixed concrete, and Emerchrome, the heavy duty, non-slip, abrasive color hardener. L. M. Scofield Company.

(281) Towel, napkin, facial and toilet tissue dispensers featuring the new recessed fixture for all types of folded towels, requiring no additional parts to convert from one type to another, and the dispenser which will dispense all brands of facial tissue. Surface mounted units are installed with Scott special adhesive which eliminates drilling holes and marring walls. Scott Paper Company.

(282) Shell-Craft Kapiz Shell paneling created from natural ocean pearl shells, hand selected, processed and laminated to produce a unique and highly ornate surfacing for wall paneling, table tops, screens, furniture, lamps and other decorative uses. Shell Arts Co.

(283) Manufacturers of Permaglas gas or electric residential water heaters, water conditioners, copper boilers and large volume storage water tanks, and Burkay gas or electric commercial water heaters and swimming pool heaters. A. O. Smith Corporation.

(284) Service to the architects for projects in their areas to establish tentative load and service needs for exterior and interior artificial lighting to meet I.E.S. Standards, adequate electric space heating and air conditioning, and electric cooking and water heating. Southern California Edison Company.

(285) Exhibiting samples of 80 out of 220 known varieties of marble in the world, including imported marble finished in this country, and domestic marble and granite, in a variety of types and colors to facilitate selections. These are available from California Marble Co., Musto-Keenan Co., Selectile Co., Inc., Ver-

mont Marble Co., and Carthage-Georgia Marble Co., association members. Southern California Marble Dealers Association.

(286) Exhibiting Olsonite solid plastic toilet seats featuring the special vinyl bumpers and the exclusive patented finger tight lock nuts and washers. All are available in pottery matching colors and black, white and pearl. Swedish Crucible Steel Company.

(287) Residential and commercial flooring including Flexachrome, the homogenous vinyl asbestos in the new designer solid colors as well as marbleized and many other designs and patterns, Tile-Tex asphalt asbestos and Supertuflex grease resistant asphalt asbestos in a wide selection of patterns and colors. Tile-Tex Division, the Flintkote Company.

(288) Range hoods, oven ventilators and hoods, bathroom and kitchen ventilators and forced air ceiling and insert electric wall heaters and baseboard heating. Other equipment includes Hunter ventilating and circulating fans, electronic cooling and electric heaters. Trade-Wind Motor Fans, Inc.

(289) Micarta decorative laminate, unfinished, prefinished plywood, paneling in a wide variety of woods, Glasweld exterior facing, and particle and flake board. Other products include Weldwood solid and hollow core, sound proof and X-Ray doors, Stay-Strate and Micarta faced doors, Kalistron vinyl fabric, Flexwood, exterior and interior plywood, both soft and hard concrete forms and wood siding. U. S. Plywood Corp.

(290) Royal Naugahyde expanded vinyl fabric, genuine Naugahyde vinyl fabric, and Naugaweave, breathable vinyl fabric for all types of upholstery in a rich selection of colors, patterns and texture. The display also includes samples of the eight standard colors of Royal vinyl carpet. U. S. Rubber Company.

(291) A new and revolutionary collection of vinyl wall coverings in textures and patterns. Also manufacture a complete line of repeat pattern and scenic wall papers, including vinyl protected papers, and import textured, burlap, silk and foil wall coverings. Albert Van Luit & Company.

(292) The new and improved Sauna dry heat bath for use in residences, hotels, hospitals, country clubs, etc., to improve health and relax nerves. Electric units heat the redwood lined room to 175° or more in 15 minutes and keep humidity below 6% for ease of breathing. Thermosytically controlled, it is inexpensive to operate, and is available in sizes from 4' x 5' to the 1 large 20' x 30', heated by two or more units in connecting series. Viking Sauna Corporation.

(293) Mo-Sai exposed aggregate precast facing. Also have Granux, a polished facing of reconstituted granite, and are custom fabricators of all types of precast concrete products—decorative, architectural and structural. Wailes Precast Concrete Corp.

(294) Facings and related precast and prefabricated items utilizing

natural stone, and a rotating display of stone available in the 11 western states, illustrating an extensive stock. For the architect, decorator, landscape architect and color consultant, a unique service including information and availability of unusual and interesting stone from the many small, remotely situated quarries represented. Western States Stone Co.

(295) Mod'rn-Form all Formica modular cabinetry for hospitals, professional buildings, and laboratories. Also available, a service including the complete furnishing of equipment and supplies required in buildings of this type. Western Surgical.

(296) Rilco laminated beams, Roddis prefinished hardwood plywood and doors including hollow and solid core, sound, X-Ray, fire and plastic laminate covered, Versabord particle board, Timblend flake board, and 4-Square exterior and interior plywood, a wide variety of siding and paneling, framing lumber, fencing, and red cedar shingles and shakes. Weyerhaeuser Company.

(297) Manufacture true parquet flooring of Arkansas oak made in 19 by 19 square units composed of 16 small squares containing individual strips assembled so that the grain direction changes in each square to minimize contraction and expansions. Wilson Oak Flooring Company.

(298) The Valtronic Corp. molded modules (stock price) for hospitals, professional buildings, and laboratories. Rex Wilson.

(299) Heraklith wood wool slabs for all types of thermal insulation, roof decking, concrete forming, masonry sheathing and partitions. Manufactured by a special process using magnesite as the binding agent to preserve the essential properties of the wood fibres, carries a three hour fire rating. It is also used as an acoustical material for sound absorption and isolation, noise reduction and for mobile sound barriers. In gardens it makes a decorative shield for privacy and acts as a perfect sound barrier. Harold A. Whipple Corp.

(300) Fine hardwood flooring in parquetry and plank, featuring 20 different designs and woods, including both custom and pre-finished, and available in laminated or solid construction, some of which can be installed on grade and below grade on concrete slabs. Wood Mosaic Corp.

(301) Decorative escutcheons and handles, mortise, cylindrical and monolock sets, panic exit devices and door closers suitable for residential and light and heavy commercial buildings. Also manufacture a complete line of builders hardware for all types of construction. Yale and Towne Mfg. Co.

(302) Stainless steel sinks including a custom sink, bar sink, vegetable chopping block sink and a double bowl sink. Also manufacture 800 standard sink and work surface combinations in stainless steel and custom sinks for residences, hospitals, laboratories and restaurants. Zeigler-Harris Corp.



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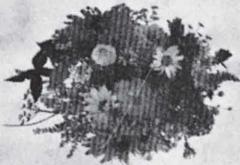
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